REPORT DOCUMENTATION PAGE

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1. REPORT DATE *(DD-MM-YYYY)*	2. REPORT TYPE	3. DATES COVERED *(From - To)*
5/Nov/2001	THESIS	

4. TITLE AND SUBTITLE
GLOBALIZATION OF THE US DEFENSE INDUSTRIAL BASE:DEVELOPING PROCUREMENT SOURCES ABROAD THROUGH EXPORTING ADVANCED MILITARY TECHNOLOGY

5a. CONTRACT NUMBER

5b. GRANT NUMBER

5c. PROGRAM ELEMENT NUMBER

6. AUTHOR(S)
CAPT BORICH ROBERT A JR

5d. PROJECT NUMBER

5e. TASK NUMBER

5f. WORK UNIT NUMBER

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)
GEORGE WASHINGTON UNIVERSITY

8. PERFORMING ORGANIZATION REPORT NUMBER
CI01-294

9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)
THE DEPARTMENT OF THE AIR FORCE
AFIT/CIA, BLDG 125
2950 P STREET
WPAFB OH 45433

10. SPONSOR/MONITOR'S ACRONYM(S)

11. SPONSOR/MONITOR'S REPORT NUMBER(S)

12. DISTRIBUTION/AVAILABILITY STATEMENT
Unlimited distribution
In Accordance With AFI 35-205/AFIT Sup 1

13. SUPPLEMENTARY NOTES

14. ABSTRACT

15. SUBJECT TERMS

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT	b. ABSTRACT	c. THIS PAGE		94	19b. TELEPHONE NUMBER *(Include area code)*

AFMC

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GLOBALIZATION OF THE U.S. DEFENSE INDUSTRIAL BASE: DEVELOPING PROCUREMENT SOURCES ABROAD THROUGH EXPORTING ADVANCED MILITARY TECHNOLOGY

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A Thesis submitted to
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The George Washington University
Law School
In partial satisfaction of the requirements
For the degree of Master of Laws

August 31, 2001

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To: Holland Jeannette D A1C AFIT/CIA
Subject: Public Review Release

Jeannette,

The article written by Maj Borish has been sent to Air Staff and possibily the State Department for review because of the contents of the publication.

This decision was made by Mr Jim Morrows, AFMC/PA, Security Policy Officer.

If you have any questions, please call our office.

Thank you, and have a great day!

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TABLE OF AUTHORITIES

STATUTES

Act Implementing Article 26(2) of the Basic Law (War Weapons Control Act) of April 20, 1961, 1961 Federal Law Gazette I-444, *available at* http://projects.sipri.se/expcon/natexpcon/Germany/kwkg.htm (last visited March 20, 2001) 20, 21, 33, 37

Arms Export Control Act, 22 U.S.C. § 2751 (2000). 3, 5, 7, 31, 32, 33, 37

Atomic Energy Act, 42 U.S.C. §§ 2011 (2000) 11

Decree-Law of 18 April 1939 creating a regime for war materials, arms, and munitions, Art. 13, *available at* http://projects.sipri.se/expcon/natexpcon/France/fralaw.htm (April 18, 1939) 24, 25, 31, 37

Export Administration Act, 50 U.S.C. app. § 2401 (2000) 10

Export Control Bill and Non Proliferation (Draft), *available at* http://projects.sipri.se/expcon/natexpcon/UK/qsp.htm (last visited March 21, 2001).. 16, 27, 29, 30, 33

Foreign Trade and Payments Act of 28 April 1961, as amended 20, 21, 22

Import and Export Control Act, 1990, Chapter 45, *available at* http://projects.sipri.se/expcon/natexpcon/UK/ukcust90.htm (Dec. 6, 1990) 16

Import, Export and Customs Powers (Defence) Act, 1939, 2 & 3 Geo. 6, c.69, Revised to 29 February 1980, *available at* http://projects.sipri.se/expcon/natexpcon/UK/ukcust39.htm (last visited April 25, 2001) 16

Order in Council of 2 October 1992 relating to the procedure for importation and exportation of war material, arms, and munitions, and analogous material, Arts. 5, 9, *available at* http://projects.sipri.se/expcon/natexpcon/France/fraord.htm (Oct. 2, 1992) 25, 31, 36

The Export of Goods (Control) Order, SI 1994/1191, as amended, *available at* http://projects.sipri.se/expcon/natexpcon/UK/ukeco.htm (last visited March 21, 2001), and *available at* http://www.hmso.gov.uk (last modified Sept. 20, 2000) 17, 37

RULES

EU Code of Conduct for Arms Exports, 8 June 1998, *available at* http://projects.sipri.se/expcon/eucode.htm 12

REGULATIONS

Council Regulation (EC) No 1334/2000 of 22 June 2000 setting up a Community regime for the control of exports of dual-use items and technology, *available at* http://www.dti.gov.uk/export.control/legislation/ecreg.htm (last modified Oct. 16, 2000) 15, 27, 28, 29, 30, 35, 37

Export Administration Regulation, 15 C.F.R. Part 730 *et seq.* (2001) 10

International Traffic in Arms Regulations, 22 C.F.R. Parts 120-130 (1999) 3, 7, 8, 15, 27, 28, 29, 30, 32, 33, 34, 35, 36, 37, 73, 74, 76, 77, 78, 79, 81, 87, 88, 90

The Dual-Use Items (Export Control) Regulations 2000, SI 2000/2620 ..... 17, 18, 27

The National Industrial Security Program Operating Manual, DoD 5220.22-M, ¶ 1-100 (1995) 8, 9, 31

TREATIES

Article 223 of the Treaty of Rome, *available at* http://projects.sipri.se/expcon/euframe/art223.htm (1957) 14

Treaty Establishing the European Community, *available at* http://europa.eu.int/abc/obj/treaties/en/entoc05.htm (1957) 14

LEGISLATIVE REPORTS

Select Committee on Trade and Industry, Second Report, *Strategic Export Controls*, Ch. II, ¶ 29, *available at* http://www.parliament.the-stationary-office.co.uk (Dec. 10, 1998) 16, 32

POLICY

French National Policy Statement, Part 1 §§ 1, 3, *available at* http://projects.sipri.se/expcon/natexpcon/France/fraosce.htm (June 1995)..... 23, 24, 25, 26

Guidelines for international arms transfers in the context of General Assembly resolution 46/36 H of 6 December 1991, *available at* http://projects.sipri.se/expcon/acn10.htm (May 1996) 41

Policy Principles of the Government of the Federal Republic of Germany for the Export of War Weapons and Other Military Equipment, *available at* http://projects.sipri.se/expcon/natexpcon/Germany/frg_guide.htm (Jan. 19, 2000).... 19, 20, 21, 22, 36

UK national criteria for considering conventional arms export licenses, *available at* http://projects.sipri.se/expcon/UK/uk_criteria.html (July 28, 1997) 18, 33

PRINCIPLES

Declaration of Principles for Defense Equipment and Industrial Cooperation, The Department of Defense of the United States of America and The Ministry of Defence of the United Kingdom of Great Britain and Northern Ireland, *available at* http://www.bdsw.org/Public/dso/dsoprin2.htm (Feb. 5, 2000)..... 43, 85, 86, 91, 94

United States Department of Defense (USDOD) and Australian Department of Defence (ASDOD) Statement of Principles for Enhanced Cooperation in Matters of Defense Equipment and Industry, *available at* http://www.defenselink.mil/news/Jul2000/b07172000_bt412-00.pdf (July 17, 2000) 85, 91, 94

OTHER AUTHORITIES

Ann R. Markusen and Sean S. Costigan, *The Military Industrial Challenge*, *in* Arming the Future: A Defense Industry For The 21st Century, Council On Foreign Relations Press 3, 7 (1999) 2

Background Note-Export Control Bill, Export Control Organisation, Department of Trade & Industry, *at* http://www.dti.gov.uk/export.control/notices/2000/notice115.htm (last visited March 21, 2001) 17, 27, 29, 30, 33

Defense Trade Security Initiative, U.S. Department of State, *available at* http://www.secretary.state.gov/www/briefings/statements/2000/ps000524d.html (May 24, 2000) 4, 69, 70, 71, 72, 74, 76, 77, 78, 79, 80, 81, 83

Defense Trade Security Initiative: Exemption for Export of Technical Data in Response to DoD Requests for Proposals - Fact Sheet, U.S. Department of State, Bureau of Political-Military Affairs, and U.S. Department of Defense, Undersecretary of Defense for Acquisition, Technology and Logistics, *available at* http://www.state.gov/www/global/arms/bureau_pm/dtc/fs_000524_tech_data.htm (May 24, 2000) 3, 72, 74, 87

Defense Trade Security Initiative: Expedited License Review Process for Defense Capabilities Initiative – Fact Sheet, U.S. Department of State, Bureau of Political-Military Affairs, and U.S. Department of Defense, Undersecretary of Defense for Acquisition, Technology and Logistics, *available at* http://www.state.gov/www/global/arms/bureau_pm/dtc/fs_000524_dci.html (May 24, 2000) 81, 82, 83, 88, 89

Defense Trade Security Initiative: Extension of ITAR Exemption to Qualified Countries - Fact Sheet, U.S. Department of State, Bureau of Political-Military Affairs, and U.S. Department of Defense, Undersecretary of Defense for Acquisition, Technology and Logistics, *available at* http://www.state.gov/www/global/arms/bureau_pm/dtc/fs_000524_extension.html (May 24, 2000) 42, 74, 87

Defense Trade Security Initiative: Global Project Authorization - Fact Sheet, U.S. Department of State, Bureau of Political-Military Affairs, and U.S. Department of Defense, Undersecretary of Defense for Acquisition, Technology and Logistics, *available at* http://www.state.gov/www/global/arms/bureau_pm/dtc/fs_000524_gpa.html (May 24, 2000) 77, 88, 90

Defense Trade Security Initiative: Global Project Authorization - Questions & Answers, U.S. Department of Defense, *available at* http://www.dsca.osd.mil/dtsi/glblprjauthqa.pdf (May 24, 2000) 77, 88, 90

Defense Trade Security Initiative: Improving DoD's Use of ITAR Exemptions - Fact Sheet, U.S. Department of State, Bureau of Political-Military Affairs, and U.S. Department of Defense, Undersecretary of Defense for Acquisition, Technology and Logistics, *available at* http://www.state.gov/www/global/arms/bureau_pm/dtc/fs_000524_itar.html (March 24, 2000) 76, 87

Defense Trade Security Initiative: Major Program Authorization – Fact Sheet, U.S. Department of State, Bureau of Political-Military Affairs, and U.S. Department of Defense, Undersecretary of Defense for Acquisition, Technology and Logistics, *available at* http://www.state.gov/www/global/arms/bureau_pm/dtc/fs_000524_program.html (May 24, 2000); 79, 80, 88

Defense Trade Security Initiative: Major Project Authorization – Fact Sheet, U.S. Department of State, Bureau of Political-Military Affairs, and U.S. Department of Defense, Undersecretary of Defense for Acquisition, Technology and Logistics, *available at* http://www.state.gov/www/global/arms/bureau_pm/dtc/fs_000524_project.html (May 24, 2000) 79, 80, 88

Defense Trade Security Initiative: Periodic Review of the USML – Fact Sheet, U.S. Department of State, Bureau of Political-Military Affairs, and U.S. Department of Defense, Undersecretary of Defense for Acquisition, Technology and Logistics, *available at* http://www.state.gov/www/global/arms/bureau_pm/dtc/fs_000524_usml.html (May 24, 2000) 83, 84, 89

Defense Trade Security Initiative Promotes Cooperation and Greater Technology Sharing With U.S. Coalition Partners, U.S. Department of State, Bureau of Political Military Affairs, *available at* http://www.state.gov./www/global/arms/bureau_pm/dtc/nb_000526_dtsi.html (May 26, 2000) 70

Defense Trade Security Initiative: Special Commercial Satellite Licensing Regime – Fact Sheet, U.S. Department of State, Bureau of Political-Military Affairs, and U.S. Department of Defense, Undersecretary of Defense for Acquisition, Technology and Logistics, *available at* http://www.state.gov/www/global/arms/bureau_pm/dtc/fs_000524_comsats.html (May 24, 2000) 80, 81, 88

Defense Trade Security Initiative: Technical Data Exports for Acquisitions, Teaming Arrangements, Mergers, Joint Ventures and Similar Arrangements – Fact Sheet, U.S. Department of State, Bureau of Political-Military Affairs, and U.S. Department of Defense, Undersecretary of Defense for Acquisition, Technology and Logistics, *available at* http://www.state.gov/www/global/arms/bureau_pm/dtc/fs_000524_mergers.html (May 24, 2000) 78, 88

Defense Trade Security Initiative: Technical Data Exports for Acquisitions, Teaming Arrangements, Mergers, Joint Ventures and Similar Arrangements – Questions and Answers, U.S. Department of Defense, *available at* http://www.dsca.osd.mil/dtsi/techdataxprt4acq_tms_mgrs_jtvenqa.pdf (May 24, 2000) 79, 88

Defense Trade: Status of the Department of Defense's Initiatives on Defense Cooperation, United States General Accounting Office, National Security and International Affairs Division, B-285661 (July 19, 2000).... 4, 69, 70, 71, 84, 85, 91, 94

Do I need a licence? A brief guide to controls administered by the Export Control Organisation, Export Control Organisation, Department of Trade & Industry, *at* http://www.dti.gov.uk/export.control/pdfs/briefguide.pdf (last visited April 25, 2001) 17

Dr. Elinor Sloan, *DCI: Responding to the US-led Revolution in Military Affairs*, 48 NATO Review No. 1, p. 4-7 (Spring-Summer 2000) 1

End-User Undertakings – Guidance for Form EUU01, Export Control Organisation, Department of Trade and Industry *at* http://www.dti.gov.uk/export.control/notices/2000/notice111.htm (Nov. 2000) ... 34, 35

Erik Pages, *Defense Mergers: Weapons Cost, Innovation, and International Arms Industry Cooperation*, *in* Arming the Future: A Defense Industry For The 21st Century, Council On Foreign Relations Press 3, 7 (1999) (quoting William E. Kovacic and Dennis E. Smallwood, Competition Policy, Rivalries, and Defense Industry

Consolidation, Journal of Economic Perspectives 8, No. 4, pp. 91, 102-103 (Fall 1994) 2
Export compliance: Re-exports, Stockholm International Peace Research Institute, *at* http://projects.sipri.se/expcon/compliance/reexport.htm (last visited March 20, 2001) 34
Export Controls: Brief Outline, p. 10, Federal Office of Economics and Export Control, *at* http://www.bundesausfuhramt.de/einfuehr/pdf/exp_kone.pdf (Nov. 1, 2000)..... 20, 21, 22
Fact Sheet: Wassenaar Arrangement on Arms Export Controls, Stockholm International Peace Research Institute, *at* http://projects.sipri.se/expcon/acdawass.htm (last visited March 20, 2001)..... 38
FR Germany: National Export Control System, Stockholm International Peace Research Institute, *at* http://projects.sipri.se/expcon/natexpcon/Germany/germany.htm (July 1998) 22, 37
FR Germany: Response to the Questionnaire on OSCE Participating States Policy and/or National Practices and Procedures for the Export of Conventional Arms and Related Technology, Question 2(2), *available at* http://projects.sipri.se/expcon/natexpcon/Germany/frgosce.htm (June 17, 1999).....21, 22, 32
France: National export control system for conventional arms, Stockholm International Peace Research Institute, *at* http://projects.sipri.se/expcon/natexpcon/France/france.htm (last visited April 26, 2001) 25, 36, 37
French Policy on Export Controls for Conventional Arms and Dual-Use Goods and Technologies, ¶ 3A, *at* http://projects.sipri.se/expcon/natexpcon/France/frenchpolicy.htm (last visited March 20, 2001) 23, 26
Guidance Note on the Dual-Use Items (Export Control) Regulations 2000, Export Control Organisation, Department of Trade & Industry, *at* http://www.dti.gov.uk/export.control/pdfs/guidnote.pdf (Oct. 2000)..... 18
Guidance on Supporting Documentation Needed When Applying for a Standard Individual Export Licence (SIEL), Export Control Organisation, Department of Trade and Industry, at http://dti2info1.dti.gov.uk/export.control.applying/sielguide.htm (Feb. 2000) 35
Merriam-Webster's Collegiate Dictionary, *available at* http://www.m-w.com/cgi-bin/dictionary (last visited June 9, 2001)..... 2
Missile Technology Control Regime (MTCR), U.S. Department of State, *at* http://www.state.gov/www/global/arms/np/mtcr/mtct99.html (Jan. 20, 2001)..... 39, 40
Missile Technology Control Regime: Guidelines for Sensitive Missile-Relevant Transfers, Stockholm International Peace Research Institute, *at* http://projects.sipri.se/expcon/mrcrguidelines.htm (last visited March 21, 2001)..... 39
NATO Expedite List for Munitions Export Licenses (2000), Defense Capabilities Initiative (Oct. 30, 2000)..... 83
New Export Exemption for Closest Allies To Promote Defense Security, U.S. Department of State, Bureau of Political Military Affairs, *available at*

http://www.state.gov/www/global/arms/bureau_pm/dtc/nb_000526_export.html (May 26, 2000) 72
Organization on Security and Co-operation in Europe (OSCE) Criteria on Conventional Arms Transfers, available at http://projects.sipri.se/expcon/oscecat.htm (last visited March 21, 2001) 40
Panel on Advanced Technology Competition and the Industrialized Allies, Office of International Affairs, National Research Council, *International Competition in Advanced Technology: Decisions for America*, National Academy Press (1983) 1
Premises for Policy: Maintaining Military Superiority In The 21st Century, 1999 Final Report, Secretary of Defense Strategic Studies Group IV, Department of Defense, U.S.A. (1999) 4, 44, 45, 46, 47, 55, 65, 68, 69, 89, 93
Report of the Defense Science Board Task Force on Globalization and Security, Defense Science Board, Office of the Under Secretary of Defense for Acquisition and Technology, Department of Defense, U.S.A (Dec. 1999) ... 4, 38, 44, 45, 46, 47, 53, 55, 65, 66, 67, 68, 69, 89, 93
Richard Grimmett, *Conventional Arms Transfers: President Clinton's Policy Directive*, p.10, May 17, 1995, Congressional Research Service, Library of Congress, *available at* http://camaro.acq.osd.mil/acic/treaties/small/us/us_transfer_policy.htm 11
Seventeen Agreed Proposals of the Defense Trade Security Initiative, U.S. Department of State, Bureau of Political Military Affairs, *available at* http://www.state.gov/www/global/arms/bureau_pm/dtc/fs_000526_proposals.html (May 26, 2000) 71
Supplementary Guidance Note on the Export of Technology, Export Control Agency, Department of Trade & Industry, *at* http://www.dti.gov.uk/export.control/publications/bizguide/xtec.htm (last modified Oct. 2000) 15, 17, 27, 29
"Supplementary Information", Exports of Commercial Communications Satellite Components, Systems, Parts, Accessories and Associated Technical Data, 65 Fed. Reg. 34,089, 34,090 (May 26, 2000) 80
The Bundesrat as a constitutional body, Bundesrat, *at* http://www.bundesrat.de/Englisch/Wissen/Verfass1.html (last visited April 18, 2001) 33
The EU and conventional arms transfer policy, Stockholm International Peace Research Institute, *at* http://projects.sipri.se/expcon/ueframe/euintro.htm (last visited March 20, 2001) 19
The European Union and Conventional Arms Transfers, Stockholm International Peace Research Institute, *at* http://projects.sipri.se/expcon/euframe/eufframe.htm (last visited March 30, 2001) 14, 29
The Honorable Jacques S. Gansler, Under Secretary of Defense (Acquisition and Technology), Speech at World Aerospace and Air Transport Conference, London (July 20; 2000), *in* Financial Times, 2000 ..... 1, 2, 3, 4, 5, 42, 53, 69, 87, 92, 94
The Wassenaar Arrangement, The Wassenaar Arrangment on Export Controls for Conventional Arms and Dual-Use Goods and Technologies, *at* http://www.wassenaar.org/docs/talkpts.html (Jan. 17, 2001) 38

Treaty of Rome, available at http://ps.ucdavis.edu/classes/ire001/econ/tofr.htm (last visited June 13, 2001) 14, 29
U.S. Response to the Questionnaire on WA Participating States' Policy and/or National Practices and Procedures for the Export of Conventional Arms and Dual-Use Goods, including related Software and Technology, Part II ¶ 2, *available at* http://projects.sipri.se/expcon/natexpcon/USA/uswaq1.htm (last visited March 20, 2001 ..... 10, 11, 27, 31, 35
UK export control system of conventional arms and related dual-use technologies, Stockholm International Peace Research Institute, *available at* http://projects.sipri.se/expcon/natexpcon/UK/uk.htm (January 1998) 17, 31, 35
UK, US discussions on defence export controls, Defence Systems Daily, *available at* http://defence-data.com/archive/page9686.htm (Jan. 22, 2001) 43, 93
United States: National Exports Controls For Conventional Weapons, Stockholm International Peace Research Institute, *at* http://projects.sipri.se/expcon/natexpcon/USA/usa.htm (Oct. 1999) 8, 31, 34
Wassenaar Arrangement on Export Controls for Conventional Arms and Dual-Use Goods and Technologies, U.S. Department of State, *at* http://www.state.gove/www/global/arms/np/mtcr/000322_wassenaar.html (Jan. 29, 2001) 38
What is the OSCE? and *From CSCE to OSCE*, Organization for Security and Co-operation in Europe, *at* http://www.osce.org (Jan. 2001) 40

I. INTRODUCTION – THE IMPORTANCE OF EXPORTING ADVANCED U.S. MILITARY TECHNOLOGY TO CREATE FOREIGN PROCUREMENT SOURCES

The Department of Defense (DoD) is currently seeking closer procurement relationships with U.S. allies.[1] DoD has argued that future U.S. national security depends on the U.S. globalizing its defense procurement practices.[2] In particular, DoD feels that greater transfers of advanced U.S. military technology to U.S. allies will result in developing procurement sources critical to continued U.S. military dominance.[3]

DoD partly bases its position on the idea that future military actions likely will take place in a multinational coalition environment.[4] In the coalition environment, DoD argues that the U.S. will suffer from the vulnerabilities of its weaker partners.[5] Greater exports of military technology can lead to cooperative procurements that create an

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[1] *See* The Honorable Jacques S. Gansler, Under Secretary of Defense (Acquisition and Technology), Speech at World Aerospace and Air Transport Conference, London (July 20, 2000), *in* Financial Times, 2000

[2] *See Id.*

[3] "Advanced" U.S. military technology includes that which U.S. Allies require to develop and produce equipment and communications abilities "interoperable" with U.S. systems. *See Id.* "Advanced military technology" can be defined as technology in the areas of aerospace, telecommunications, microelectronics, computers, biotechnology, and robotics that have a military application. *See* Panel on Advanced Technology Competition and the Industrialized Allies, Office of International Affairs, National Research Council, *International Competition in Advanced Technology: Decisions for America*, National Academy Press (1983)

[4] Gansler Speech, *supra* note 1

[5] *Id.*; For example, during Operation Allied Force (Kosovo Conflict) in the Spring of 1999, the European NATO participants lacked capabilities such as strategic and precision bombing, and stealth, reconnaissance, and surveillance aircraft. Dr. Elinor Sloan, *DCI: Responding to the US-led Revolution in Military Affairs*, 48 NATO Review No. 1, p. 4-7 (Spring-Summer 2000)

"interoperability" of systems among coalition partners and alleviate vulnerabilities.[6]

Due to recent consolidation of the U.S. defense industry, DoD is also concerned whether sufficient competition will exist in the U.S. defense industry to produce the advanced technologies necessary for the U.S. to keep its edge over adversaries.[7] U.S. willingness to transfer advanced technology to potential European procurement sources could result in competition that creates greater efficiencies and innovations.[8] DoD further fears that failure to open competition opportunities to European suppliers, through

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[6] The definition of "interoperability" is the "ability of a system (as a weapon system) to use the parts or equipment of another system." Merriam-Webster's Collegiate Dictionary, *available at* http://www.m-w.com/cgi-bin/dictionary (last visited June 9, 2001). With the necessary advanced U.S. military technology, contractors located in allied countries can develop and produce "interoperable" defense equipment and communications abilities that the DoD can procure for use in its defense systems. *See, e.g.*, Gansler Speech, *supra* note 1

[7] Gansler Speech, *supra note 1;* Recent mergers in the U.S. defense industry have "reduced the competitors to a small number of relatively heavily defense-dedicated companies: Lockheed Martin, Boeing, Raytheon, and Northrop Grumman." Ann R. Markusen and Sean S. Costigan, *The Military Industrial Challenge*, *in* Arming the Future: A Defense Industry For The 21st Century, Council On Foreign Relations Press 3, 7 (1999); 'The main potential hazard of mergers is the danger that technological competition will diminish, and that specific technologies may become entrenched as the one or two remaining suppliers freeze out innovative design approaches that threaten their vested interest or defy conventional wisdom.' Erik Pages, *Defense Mergers: Weapons Cost, Innovation, and International Arms Industry Cooperation*, *in* Arming the Future: A Defense Industry For The 21st Century, Council On Foreign Relations Press 3, 7 (1999) (quoting William E. Kovacic and Dennis E. Smallwood, Competition Policy, Rivalries, and Defense Industry Consolidation, Journal of Economic Perspectives 8, No. 4, pp. 91, 102-103 (Fall 1994)

[8] DoD is pursuing a "competitive, transatlantic model, characterized by industrial linkages of multiple firms, operating on both sides of the ocean, effectively competing in both the large European and U.S. markets – and sharing technology (with, of course, effective external technology controls being applied)." *See* Gansler Speech, *supra* note 1

technology exports, will lead to defense trade blocks between Europe and the U.S.[9] This could further the technological gap between the U.S. military and its allies, severely diminishing goals of "interoperability".[10]

With greater access to advanced U.S. military technology, foreign companies located in allied countries will be able to compete for and perform on more DoD contracts that are based on advanced technology.[11] Although DoD needs to facilitate these greater exports of advanced technology, it faces barriers in the form of U.S. law and policy. The U.S. Government, based on U.S. export control laws and U.S. national security concerns, limits U.S. companies from exporting their advanced military-related technologies to foreign companies.[12] Primarily, the U.S. Government's concern with allowing the export

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[9] *Id.*

[10] *Id.*

[11] *See* Gansler Speech, *supra* note 1. For example, foreign companies need access to the U.S. technology underlying the procurement in order to be able to prepare bids or proposals, and assess whether they can meet the performance requirements. DoD and the U.S. Department of State recognized these issues recently in the U.S. Defense Trade Security Initiative and in an International Traffic in Arms Regulations amendment. *See* 22 C.F.R. § 126.14(a)(4) (2000); *Defense Trade Security Initiative: Exemption for Export of Technical Data in Response to DoD Requests for Proposals - Fact Sheet*, U.S. Department of State, Bureau of Political-Military Affairs, and U.S. Department of Defense, Undersecretary of Defense for Acquisition, Technology and Logistics, *available at* http://www.state.gov/www/global/arms/bureau_pm/dtc/fs_000524_tech_data.htm (May 24, 2000)

[12] *See* Gansler Speech, *supra* note 1; *See, e.g.*, Arms Export Control Act, 22 U.S.C. § 2751 (2000). Under the Arms Export Control Act, the U.S. Government cannot sell or lease defense articles to, or enter into cooperative project agreements with foreign countries, unless it finds the export will strengthen the security of the U.S. and promote world peace. *Id.* at § 2753

of these advanced technologies is that they may fall into the hands of U.S. adversaries.[13]

In light of the increasing commercialization and globalization of the U.S. technology market, DoD recently has reviewed the current national security concerns associated with exporting U.S. military technologies to U.S. Allies.[14] Based on its review, DoD has participated in creating initiatives to relax U.S. export controls for military technology exports and to increase foreign participation in DoD procurements.[15] Although DoD has sought liberalized U.S. export controls, it requires that U.S. Allies' export control regimes strictly protect military technology before DoD will agree to provide them exports of U.S. advanced military technology.[16]

This article examines whether or not U.S. export control laws and U.S. national security concerns should prevent advanced military technology exports to U.S. Allies, and whether or not DoD's initiatives will facilitate the advanced military technology exports that it has argued are critical to the future of U.S. military dominance. Accordingly, this article focuses on three areas: First, it reviews U.S. export control laws applicable to advanced U.S. military technology, and reviews and compares the export

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[13] *See* Gansler Speech, *supra* note 1; *See Report of the Defense Science Board Task Force on Globalization and Security*, Defense Science Board, Office of the Under Secretary of Defense for Acquisition and Technology, Department of Defense, U.S.A (Dec. 1999), at Gansler Memorandum.

[14] *See, generally, Defense Science Board Report*, supra note 13; Premises for Policy: Maintaining Military Superiority In The 21st Century, 1999 Final Report, Secretary of Defense Strategic Studies Group IV, Department of Defense, U.S.A. (1999)

[15] *See, generally*, Defense Trade Security Initiative, U.S. Department of State, *available at* http://www.secretary.state.gov/www/briefings/statements/2000/ps000524d.html (May 24, 2000); *See Defense Trade: Status of the Department of Defense's Initiatives on Defense Cooperation*, United States General Accounting Office, National Security and International Affairs Division, B-285661 (July 19, 2000)

[16] *See* Gansler Speech, *supra* note 1

control laws of prominent U.S. Allies. Second, it looks at DoD's recent studies into the national security concerns in transferring military technology to U.S. Allies. Finally, it evaluates DoD's initiatives for greater transfers of advanced military technology to U.S. Allies.

II. REVIEW OF EXPORT CONTROLS LAWS APPLICABLE TO TRANSFERRING MILITARY TECHNOLOGY ABROAD

Export control laws represent one of the barriers to DoD facilitating greater advanced military technology exports to U.S. Allies.[17] These laws generally provide that the U.S. government cannot authorize military technology exports unless it can ensure that the export will not harm U.S. and world security.[18] Through policy, DoD has added its own additional barrier by requiring that U.S. Allies have their own rigorous export controls in place before DoD will recommend approval of advanced military technology exports to foreign companies there.[19] Specifically, DoD requires that U.S. Allies have export control regimes that are "congruent and reciprocal" to the U.S. export control regime.[20]

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[17] *Gansler Speech, supra* note 1

[18] *See* 22 U.S.C. § 2751

[19] *Gansler Speech, supra* note 1

[20] The "congruent and reciprocal" test comes from what DoD calls the "pillars of cooperation". DoD has expressed that it will seek closer relationship with U.S. Allies that share these pillars. The "five pillars of cooperation" are as follows:

1. congruent and reciprocal industrial security policies and procedures;
2. congruent and reciprocal export control regimes;
3. excellent cooperative relationships in law enforcement;

Due to DoD's additional requirement, evaluating proposed advanced technology exports now entails reviewing both U.S. and U.S. Allies' export control laws. A comparison of these laws is necessary to determine whether the differences are significant enough for DoD to deny approval for advanced technology exports. Therefore, this Chapter not only examines the U.S. legal controls on exporting military technology, but also reviews the export control regimes of the following likely foreign procurement partners: the European Union, the United Kingdom, Germany, and France. A comparison is made between these export control regimes in five specific areas: Scopes of technology control; authorization to negotiate export agreements; legislative oversight; end-user requirements; and penalties for violations. This Chapter also reviews international standards relating to military technology exports that the U.S. and these foreign countries all embrace.

A. *GENERAL DESCRIPTIONS OF U.S. AND EUROPEAN EXPORT CONTROL REGIMES FOR TECHNOLOGY*

1. U.S. Export Control Regime

a. *U.S. Military Technology Controls*

Export of U.S. military technology is controlled and regulated under the provisions of the Arms Export Control Act (AECA), and the International Traffic in Arms Regulations

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4. close cooperation in intelligence sharing on matters of counterintelligence, economic espionage, industrial security, and export control violations;
5. willingness to enter into binding agreements establishing reciprocal markets.

Id.

(ITAR).[21] AECA authorizes the President to control the export of "defense articles" and "defense services", including related technologies.[22] Through a statutory delegation from the President, the Secretary of State has promulgated regulations under AECA.[23] ITAR represents these regulations.[24]

ITAR provides a "munitions list" of defense articles and services that AECA and ITAR subject to export controls.[25] These controls extend to technical data directly related to defense articles and services in the Munitions List.[26] In order to control exports, ITAR requires authorization through a licensing process.[27] The Secretary of State has delegated authority to the Office of Defense Trade Controls (ODTC) to administer ITAR and act as the licensing authority for export of defense articles and services.[28]

Under ITAR, some of the licenses ODTC can grant include export licenses, licenses

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[21] 22 U.S.C. § 2751; International Traffic in Arms Regulations, 22 C.F.R. Parts 120-130 (1999).

[22] 22 U.S.C. § 2778(a)(1); For definitions of "defense articles" and "defense services", *see* 22 U.S.C. § 2787(3),(4); 22 C.F.R. § 120.6, 120.9

[23] *Id.*; 22 C.F.R. § 120.1(a)

[24] *Id.*

[25] 22 U.S.C. § 2778, 2787(7); 22 C.F.R. § 121.1

[26] Technical data, related to items in the Munitions List, fall under the definition of defense articles. 22 C.F.R. § 120.6, 121.1

[27] *See* 22 C.F.R. Part 123

[28] 22 C.F.R. § 120.1

for "technical assistance agreements", and "manufacturing license agreements".[29] Technical assistance agreements are contracts for the performance of defense services or disclosure of technical data.[30] Manufacturing license agreements involves ODTC authorizing a "foreign person" to manufacture defense articles abroad including the export of technical data.[31]

b. *U.S. Classified Military Technology Controls*

The National Industrial Security Program Operating Manual (NISPOM) contains regulations controlling the transfer of classified technologies by Executive Branch Departments and their Agencies.[32] The President created NISPOM pursuant to executive order and has designated the Secretary of Defense as the Executive Agent for the National Industrial Security Program.[33] These regulations include policies and procedures governing executive agencies', including DoD's control of classified information in international programs and procurements.[34]

NISPOM sets out the U.S. National Disclosure Policy (NDP) for U.S. disclosure of classified information to foreign interests related to defense articles and services under

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[29] 22 C.F.R. § 123.1, 124.1; *United States: National Exports Controls For Conventional Weapons*, Stockholm International Peace Research Institute, *at* http://projects.sipri.se/expcon/natexpcon/USA/usa.htm (Oct. 1999)

[30] 22 C.F.R. § 120.22

[31] 22 C.F.R. § 120.21

[32] The National Industrial Security Program Operating Manual, DoD 5220.22-M, ¶ 1-100 (1995)

[33] DoD 5220.22-M ¶ 1-101a

[34] DoD 5220.22-M ¶ 10-100

ITAR.[35] Before authorizing transfers of classified technologies, agencies must evaluate the proposed transfer against the criteria contained in the NDP.[36] If an agency does authorize the transfer, NISPOM provides security requirements clauses to incorporate into the transfer agreement.[37]

c. *U.S. Dual-Use Technology Controls*

The Export Administration Act (EAA) and the Export Administration Regulations

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[35] DoD 5220.22-M ¶ 10-103. The NDP is provided for in NIPSOM as follows:

> U.S. Government policy is to avoid creating false impressions of its readiness to make available classified military information to foreign interests. The policy prescribes that commitments shall not be expressed or implied and there may be no disclosure of any information until a decision is made concerning the disclosure of any classified information. Decisions on the disclosure of classified military information are contingent on a decision by a principal or designated disclosure authority that the following criteria are met:
>
> a. The disclosure supports U.S. foreign policy.
>
> b. The release of classified military information will not have a negative impact on U.S. military security.
>
> c. The foreign recipient has the capacity and intent to protect the classified information.
>
> d. There is a clearly defined benefit to the U.S. Government that outweighs the risks involved.
>
> e. The release is limited to that classified information necessary to satisfy the U.S. Government objectives in authorizing the disclosure.

Id.

[36] *Id.*

[37] DoD 5220.22-M ¶ 10-204

provide controls over the export of dual-use technologies.[38] The term "dual-use" describes technology applicable to both military and commercial uses.[39] The President has delegated most of his authority under EAA to the Secretary of Commerce.[40] The Secretary of Commerce has, in turn, delegated its authority to the Under Secretary of the Bureau of Export Administration (BEA).[41] BEA promulgates the Export Administration Regulations (EAR) that implement EAA.[42]

EAR sets forth a Commercial Control List (CCL) of dual-use items, including technologies.[43] The Secretary of Defense provides a list of military critical technologies to be included in the CCL.[44] BEA must authorize, through a licensing process, the export of any technology that is listed in the CCL.[45] The Departments of State, Defense and Energy, and the Intelligence Community review license applications for export of technologies that have been listed in the CCL for national security reasons, or if the

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[38] Export Administration Act, 50 U.S.C. app. § 2401 (2000); Export Administration Regulation, 15 C.F.R. Part 730 *et seq.* (2001)

[39] 15 C.F.R. § 730.3

[40] U.S. Response to the Questionnaire on WA Participating States' Policy and/or National Practices and Procedures for the Export of Conventional Arms and Dual-Use Goods, including related Software and Technology, Part II ¶ 2, *available at* http://projects.sipri.se/expcon/natexpcon/USA/uswaq1.htm (last visited March 20, 2001)

[41] *Id.*

[42] 15 C.F.R. § 730.1

[43] 15 C.F.R. Parts 738, 742, 774

[44] *See* 50 U.S.C. app. § 2404(c)(2)

[45] 15 C.F.R. 742.4(a)

application proposes an export to a country of concern.[46]

d. *U.S. Nuclear Technology Controls*

The Atomic Energy Act (AEA) provides for control of the export of nuclear related technology.[47] Generally, AEA prohibits exports of sensitive nuclear technology for purposes of development of nuclear weapons.[48] AEA alternatively provides for international cooperative programs where the U.S. can share peaceful benefits of atomic energy.[49]

e. *U.S. Policy on Technology Transfers*

The President's Policy on Conventional Arms Transfers provides general criteria for arms transfer decisions.[50] For example, one of the criteria provides that consideration must be made of the degree of protection afforded sensitive technology and the potential for unauthorized third party transfer.[51] Another one of the criteria requires an evaluation of the effect of the proposed transfer on U.S. capabilities and its technological

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[46] U.S. Response to Questionnaire on WA Participating States' Policy and/or Practices and Procedures, *supra* note 40, at Part II ¶ 4

[47] 42 U.S.C. §§ 2011, 2156 (2000)

[48] 42 U.S.C. § 2156(2); *But see* § 42 U.S.C. 2121(c) (Provides for cooperative transfer to other nations for mutual defense and security of nonnuclear parts of atomic weapons and atomic weapons systems, utilization facilities or source, byproduct, or special nuclear material)

[49] *See* 42 U.S.C. §§ 2153, 2074; *See also* 42 U.S.C. § 2153b (Provides export policies relating to peaceful nuclear activities and international nuclear trade)

[50] Richard Grimmett, *Conventional Arms Transfers: President Clinton's Policy Directive*, p.10, May 17, 1995, Congressional Research Service, Library of Congress, *available at* http://camaro.acq.osd.mil/acic/treaties/small/us/us_transfer_policy.htm

[51] *Id.*

advantage.[52]

2. European Union's Export Control Regime for Technology

a. *EU Code of Conduct*

In 1998, the Council of the European Union adopted a code of conduct for arms exports.[53] The Code consists of eight criterion for EU member states to apply to arms

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[52] *Id.*; The other criteria provide that arms transfer decisions will take into account:

> • Consistency with international agreements and arms control initiatives.
> • Appropriateness of the transfer in responding to legitimate U.S. and recipient security needs.
> • Consistency with U.S. regional stability interests, especially when considering transfers involving power projection capability or introduction of a system which may foster increased tension or contribute to an arms race.
> • The degree to which the transfer supports U.S. strategic and foreign policy interests through increased Access and influence, allied burden-sharing, and interoperability.
> • The impact on U.S. industry and the defense industrial base whether the sale is approved or not.
> • The risk of revealing system vulnerabilities and adversely impacting U.S. operational capabilities in the event of compromise.
> • The risk of adverse economic, political or social impact within the recipient nation and the degree to which security needs can be addressed by other means.
> • The human rights, terrorism and proliferation record of the recipient and the potential for misuse of the export in question.
> • The availability of comparable systems from foreign suppliers.
> • The ability of the recipient effectively to field, support, and appropriately employ the requested system in accordance with its intended use.

Id.

[53] EU Code of Conduct for Arms Exports, 8 June 1998, *available at* http://projects.sipri.se/expcon/eucode.htm

exports, including technology transfers.[54] The Criterion provide for concerns related to arms exports, such as maintaining regional stability, unintended technology transfers, and diversions to undesirable parties.[55]

The Code also contains operative provisions.[56] These provisions require the

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[54] *Id.*

[55] The Eight Criterion in the EU Code are as follows:

> CRITERION ONE: Respect for the international commitments of EU member states, in particular the sanctions decreed by the UN Security Council and those decreed by the Community, agreements on non-proliferation and other subjects, as well as other international obligations.
>
> CRITERION TWO: The respect of human rights in the country of final destination.
>
> CRITERION THREE: The internal situation in the country of final destination, as a function of the existence of tensions or armed conflicts.
>
> CRITERION FOUR: Preservation of regional peace, security and stability.
>
> CRITERION FIVE: The national security of the member states and of territories whose external relations are the responsibility of a Member State, as well as that of friendly and allied countries.
>
> CRITERION SIX: The behaviour of the buyer country with regard to the international community, as regards in particular to its attitude to terrorism, the nature of its alliances and respect for international law.
>
> CRITERION SEVEN: The existence of a risk that the equipment will be diverted within the buyer country or re-exported under undesirable conditions.
>
> CRITERION EIGHT: The compatibility of the arms exports with the technical and economic capacity of the recipient country, taking into account the desirability that states should achieve their legitimate needs of security and defence with the least diversion for armaments of human and economic resources.

Id.

[56] *Id.* at pp. 5-6

application of the eight criterion on a case-by-case basis.[57] However, the operative provisions also provide that EU member states will use their national discretion in deciding whether to transfer or deny transfer of arms-related technology.[58] The provisions also recognize that member states are free to operate more restrictive policies.[59]

b. *EU Military Technology Controls*

The European Union is limited in controlling transfers of technology related to military arms, munitions and war material.[60] Article 223 of the Treaty Establishing the European Community states that each European Community (EC) member state "may take such measures as it considers necessary for the protection of the essential interest of its security which are connected with the production of or trade in arms, munitions and war material."[61] This effectively exempts military technology exports from EU laws.[62]

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[57] *Id.* at p. 5 ¶ 1

[58] *Id.* at p. 5 ¶ 3

[59] *Id.* at p. 5 ¶ 2

[60] As the title suggests, the Treaty created the organization known as the European Community. The Treaty is also known as the "Treaty of Rome". *See* Article 223 of the Treaty of Rome, *available at* http://projects.sipri.se/expcon/euframe/art223.htm (1957; Treaty Establishing the European Community, *available at* http://europa.eu.int/abc/obj/treaties/en/entoc05.htm (1957); *The European Union and Conventional Arms Transfers*, Stockholm International Peace Research Institute, *at* http://projects.sipri.se/expcon/euframe/eufframe.htm (last visited March 30, 2001); Treaty of Rome, available at http://ps.ucdavis.edu/classes/ire001/econ/tofr.htm (last visited June 13, 2001)

[61] Article 223 of The Treaty of Rome § 223.1(a)

[62] *See The European Union and Conventional Arms Transfers, supra* note 60

c. *EU Dual-Use Technology Controls*

The recent European Council (EC) Regulation No. 1334/2000 sets up a European Community regime for the control of exports of dual-use technologies.[63] The EC promulgated this regulation under Article 133 of the Treaty Establishing the European Community.[64] The Regulation covers civilian technologies that have potential military applications.[65] A significant feature to this new regulation is that it controls intangible, as well as tangible forms of transfers of technology.[66]

In annexes, the Regulation provides a vast list of dual-items that the Regulation's provisions control.[67] It generally requires that the EU member state, where an exporter is established, must authorize the export of any of these listed items.[68] The Regulation

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[63] Council Regulation (EC) No 1334/2000 of 22 June 2000 setting up a Community regime for the control of exports of dual-use items and technology, available at http://www.dti.gov.uk/export.control/legislation/ecreg.htm (last modified Oct. 16, 2000)

[64] *Id.* (see preface)

[65] *Id.* at Article 2(a)

[66] *Id.* at preface (8), Article 2(b)(iii). Generally, intangible forms of technology transfer include transmissions by electronic media, fax, telephone, or in person. *See Id.*; 22 C.F.R. § 125.2(c). Tangible forms of technology include information in the form of blueprints, drawings, photographs, plans, instructions, diagrams, models, formulae, tables, engineering designs, and specifications. *See* 22 C.F.R. § 120.10(a)(1); *Supplementary Guidance Note on the Export of Technology*, Export Control Agency, Department of Trade & Industry, *at* http://www.dti.gov.uk/export.control/publications/bizguide/xtec.htm (last modified Oct. 2000)

[67] *Id.* at Article 3(1), Annex I and II

[68] *Id.* at Article 6(2)

provides for a Community General Export Authorization that allows export of controlled dual-use items from anywhere in the European Community to certain destinations.[69]

3. United Kingdom's Export Control Regime for Technology

a. *U.K. Military Technology Controls*

The U.K. government's control over the export of military technologies is based on Import, Export and Customs Powers (Defence) Act of 1939.[70] The Act provides that the "Board of Trade" may make provisions to prohibit or regulate any exports from the U.K.[71] The U.K. Government created the 1939 Act pursuant to temporary emergency powers with the intent that the Act would stay in force only until the end of the then wartime emergency.[72] However, it never repealed the Act.[73] Instead, the U.K eventually made the 1939 Act permanent by enacting the Import and Export Control Act of 1990.[74] In December 2000, the Queen outlined to Parliament a draft export control bill intended

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[69] *Id.* at Article 6(1)

[70] Import, Export and Customs Powers (Defence) Act, 1939, 2 & 3 Geo. 6, c.69, Revised to 29 February 1980, *available at* http://projects.sipri.se/expcon/natexpcon/UK/ukcust39.htm (last visited April 25, 2001)

[71] *Id.* at § 1(1)

[72] Select Committee on Trade and Industry, Second Report, *Strategic Export Controls*, Ch. II, ¶ 29, *available at* http://www.parliament.the-stationary-office.co.uk (Dec. 10, 1998)

[73] *Id.*

[74] *Id.*; Import and Export Control Act, 1990, Chapter 45, *available at* http://projects.sipri.se/expcon/natexpcon/UK/ukcust90.htm *(Dec. 6, 1990)*

to eventually replace the 1939 Act.[75]

Under the authority of the 1939 Act, the Secretary of State has issued the Export of Goods (Control) Order of 1994.[76] This Order provides a list of military items that the Order prohibits from export without authorization.[77] The Order only controls tangible forms of technology related to the military items in the list.[78] The Secretary of State has delegated licensing authority under the Order to the Department of Trade and Industry (DTI).[79] In making licensing decisions, DTI may consult with the Foreign and Commonwealth Office, Ministry of Defence, or Department of International Development.[80]

b. *U.K. Dual-Use Technology Controls*

The U.K. controls dual-use technologies under its recently issued Dual-Use Items

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[75] Export Control Bill and Non Proliferation (Draft), *available at* http://projects.sipri.se/expcon/natexpcon/UK/qsp.htm (last visited March 21, 2001); *Background Note-Export Control Bill*, Export Control Organisation, Department of Trade & Industry, *at* http://www.dti.gov.uk/export.control/notices/2000/notice115.htm (last visited March 21, 2001)

[76] The Export of Goods (Control) Order, SI 1994/1191, as amended, *available at* http://projects.sipri.se/expcon/natexpcon/UK/ukeco.htm (last visited March 21, 2001), and *available at* http://www.hmso.gov.uk (last modified Sept. 20, 2000)

[77] *Id.* (see Schedule 1 referred to in Article 2)

[78] *Note on the Export of Technology*, *supra* note 66

[79] The Export of Goods (Control) Order, *supra* note 76, at Art. 7; *Do I need a licence? A brief guide to controls administered by the Export Control Organisation*, Export Control Organisation, Department of Trade & Industry, at http://www.dti.gov.uk/export.control/pdfs/briefguide.pdf (last visited April 25, 2001)

[80] *UK export control system of conventional arms and related dual-use technologies*, Stockholm International Peace Research Institute, *available at* http://projects.sipri.se/expcon/natexpcon/UK/uk.htm (January 1998)

(Export Control) Regulations 2000.[81] These Regulations incorporate provisions of the recent EC Regulation on export of dual-use technologies.[82] Particularly, the U.K. Regulation provides for the EC Regulation's control of intangible forms of dual-use technologies.[83]

The U.K. Regulation provides its own list of controlled dual-use items of technology.[84] Under the Regulation, DTI is the licensing authority for exports of any technologies on the list.[85] In accordance with the EC Regulations, the U.K. Regulation provides for DTI granting Community General Export Authorizations.[86]

c. *U.K. Policy on Technology Transfers*

The U.K. has developed criteria it uses in considering conventional arms export license applications.[87] The criteria sets out a balancing test between arguments for granting a license and the U.K.'s commitments and concerns with international obligations, national interests, human rights, international aggression, and regional

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[81] The Dual-Use Items (Export Control) Regulations 2000, SI 2000/2620

[82] *Id.* (See Explanatory Note); *Guidance Note on the Dual-Use Items (Export Control) Regulations 2000*, Export Control Organisation, Department of Trade & Industry, at http://www.dti.gov.uk/export.control/pdfs/guidnote.pdf (Oct. 2000)

[83] U.K. Dual-Use Items Regulation, *supra* note 81, at Art. 2(1)(b)

[84] *Id.* at Art. 4(3)(a) (referring to controlled items in Schedule 2)

[85] *Id.* at Art. 3(1); *Note on the Dual-Use Items (Export Control) Regulations 2000, supra* note 82

[86] *Id.*

[87] UK national criteria for considering conventional arms export licenses, *available at* http://projects.sipri.se/expcon/UK/uk_criteria.html (July 28, 1997)

stability.[88] The criteria also provides for consideration of the U.K.'s needs to protect classified information and capabilities, and risks of technology transfer.[89]

4. Germany's Export Control Regime for Technology

a. *Germany's Policy on Technology Transfers*

Germany policy is concerned with Germany never becoming a source of war again, but rather a source of peace.[90] Accordingly, Germany primarily limits arms exports to preserving the defense of NATO and its European partners.[91] Germany will not export arms to non-allies unless a particular export is seen as being a vital foreign and security policy interest of Germany.[92]

The German Government has recently developed policy principles for the export of military arms and related materials.[93] These Principles specifically provide policy for Germany's export of "war weapons" and "other military equipment."[94] War weapons are

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[88] The Criteria are grouped under the categories of "The United Kingdom's international obligations"; "The United Kingdom's national interests"; "Human rights and internal repression"; "International aggression"; and "Regional Stability". *Id.*

[89] *Id.* at Art. 11 (These are listed under the heading of "Other criteria")

[90] *The EU and conventional arms transfer policy*, Stockholm International Peace Research Institute, *at* http://projects.sipri.se/expcon/ueframe/euintro.htm (last visited March 20, 2001)

[91] *Id.*

[92] *Id.*

[93] Policy Principles of the Government of the Federal Republic of Germany for the Export of War Weapons and Other Military Equipment, *available at* http://projects.sipri.se/expcon/natexpcon/Germany/frg_guide.htm (Jan. 19, 2000)

[94] *Id.* at Art. I

defined by a list of items in the annex to the War Weapons Control Act of 1961 and annex to the Foreign Trade and Payments Act of 1961, as amended.[95] Other military equipment is also defined in the annex to the Foreign Trade and Payments Act.[96]

Germany's policy is to not restrict the export of war weapons and other military Equipment to NATO countries (or equivalent status) or to EU member states, unless political grounds exist to restrict the export.[97] However, the Principles provide very restrictive policies for exports outside NATO or the EU.[98] The Principles state that export licenses will not be granted for export of war weapons to "other countries", outside EU or NATO, unless exceptionally warranted on particular foreign and security policy grounds.[99] Regarding other military equipment, the Principles provide that licenses for export to "other countries" will only be granted if the export does not prejudice security, peace among nations and Germany's foreign relations.[100]

b. *Germany's Statutory Control over Military Technology*

The War Weapons Control Act provides that all handling of war weapons and related

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[95] *Id.* at Art. I ¶ 5, Notes (i)-(ii); *Export Controls: Brief Outline*, p. 10, Federal Office of Economics and Export Control, *at* http://www.bundesausfuhramt.de/einfuehr/pdf/exp_kone.pdf (Nov. 1, 2000)

[96] *Id.*

[97] Policy Principles of Germany for Export of War Weapons and Other Military Equipment, *supra* note 93, at Art. II ¶ 1

[98] *Id.* at Art. III

[99] *Id.* at Art. III ¶ 2

[100] *Id.* at Art. III ¶ 3

technology requires the permission of the Federal Government.[101] This includes the manufacture, acquisition and transfer of control of war weapons.[102] The Act provides that war weapons can only be transported from German federal territory if the Government has granted an export license.[103] Generally, the Federal Minister of Economics has authority to grant licenses for war weapons.[104] However, the Federal Minister of Defence has such authority for exports falling under the ambit of the Federal Armed Forces.[105]

The Federal Trade and Payments Act also controls certain war weapons included in its Export List.[106] This means a war weapons exporter must additionally meet the licensing requirements under this Act.[107] Besides war weapons, The Federal Trade and Payments

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[101] Act Implementing Article 26(2) of the Basic Law (War Weapons Control Act) of April 20, 1961, 1961 Federal Law Gazette I-444, *available at* http://projects.sipri.se/expcon/natexpcon/Germany/kwkg.htm (last visited March 20, 2001); FR Germany: Response to the Questionnaire on OSCE Participating States Policy and/or National Practices and Procedures for the Export of Conventional Arms and Related Technology, Question 2(2), *available at* http://projects.sipri.se/expcon/natexpcon/Germany/frgosce.htm (June 17, 1999)

[102] *Id.*

[103] War Weapons Control Act, *supra* note 101, at §3(3)

[104] *Id.* at § 11(2)

[105] *Id.*

[106] Foreign Trade and Payments Act of 28 April 1961, as amended; Policy Principles of Germany for Export of War Weapons and Other Military Equipment, *supra* note 93, at Art. III ¶ 2; *Export Controls: Brief Outline*, *supra* note 95

[107] *Id.*

Act controls the export of other military equipment and related technology.[108] The Act requires a license to export other military equipment.[109] A potential exporter must submit a license application to the Federal Office of Economics and Export Control, an agency of the Federal Ministry of Economics.[110] The applicant generally has a right to an export license for other military equipment unless the export is at odds with one of the principles provided in Section 7 of the Act.[111]

c. *Germany's Dual-Use Technology Controls*

The Foreign Trade and Payments Act further controls the export of dual-use technologies.[112] Dual-use technologies are included in the Act's Export List of controlled items.[113] The regulations promulgated under the Act have incorporated provisions of the EC Regulation on dual-use technology exports.[114] Licenses are required to export dual-

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[108] Foreign Trade and Payments Act, *supra* note 106; Policy Principles of Germany for Export of War Weapons and Other Military Equipment, *supra* note 93, at Art. III ¶ 3; Germany Response to the Questionnaire on OSCE Participating States Policy and/or National Practices and Procedures, *supra* note 101, at Question 2(3)

[109] *Id.*

[110] *FR Germany: National Export Control System*, Stockholm International Peace Research Institute, *at* http://projects.sipri.se/expcon/natexpcon/Germany/germany.htm (July 1998); *Export Controls: Brief Outline*, *supra* note 95, at p. 20

[111] Germany Response to the Questionnaire on OSCE Participating States Policy and/or National Practices and Procedures, *supra* note 101, at Question 2(3)

[112] Foreign Trade and Payments Act; Foreign Trade and Payments Regulation, as amended; *Export Controls: Brief Outline*, *supra* note 95, at p. 10

[113] *Id.*

[114] *Id.*

use technologies on the list.[115] The Federal Office of Economics and Export Control has the authority to grant dual-use technology export licenses.[116]

5. France's Export Control Regime for Technology

a. *French National Policy on Arms Export*

France's arms export policy is to generally prohibit arms exports and related technologies.[117] It provides exceptions to this general rule in two phases.[118] At the preliminary stage, the French Government must authorize all market explorations, negotiations, and agreements regarding arms and related technology transfers.[119] Second, the French Government must authorize the actual transfer of arms or related technology.[120]

In determining whether to authorize an export, the French Government considers certain criteria.[121] The criteria provide for an examination of France's international commitments, its relations with and the behavior of the destination country, French

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[115] *Id.*

[116] *Id.* at p.20

[117] French National Policy Statement, Part 1 §§ 1, 3, *available at* http://projects.sipri.se/expcon/natexpcon/France/fraosce.htm (June 1995); *French Policy on Export Controls for Conventional Arms and Dual-Use Goods and Technologies*, ¶ 3A, *at* http://projects.sipri.se/expcon/natexpcon/France/frenchpolicy.htm (last visited March 20, 2001)

[118] *Id.*

[119] *Id.*

[120] *Id.*

[121] French National Policy Statement, *supra* note 117, at Part 1 ¶ 2

national security, and concerns with risks that arms will be misappropriated or re-exported.[122] The French Government applies the criteria on a case-by-case basis to proposed exports.[123]

b. *France's Military Technology Controls*

A 1939 Decree-law controls the export of arms and related technologies.[124] The Law

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[122] The criteria provides that the following is taken into account:

> - respect for French international commitments whether they are sanctions from the United Nations sanctions or from the European Union; or rules flowing from commitments made by France (declarations of the European Council of Luxembourg and of Lisbon, OSCE, and MTCR).
> - state of relations with the country of destination (especially the existence of the defence agreements) and its allies and partners.
> - capacity of the arms in question to impact on the immediate security of French territory, its allies and the European political union, or its capacity to project its forces.
> - behaviour of the purchasing country in the international community. Consideration is given to the nature of its allies and its attitude toward terrorism.
> - proportionality between the requested weapons, the country's security needs, and the regional context (conflict zones, risk of increasing regional tensions).
> - existence of internal tension (civil war, Human Rights violations).
> - existence of a risk that the arms will be misappropriated or re-exported.
> - compatibility of the acquisition project with the technical and financial capabilities of the country of destination.

Id.

[123] *Id.*

[124] Decree-Law of 18 April 1939 creating a regime for war materials, arms, and munitions, Art. 13, *available at* http://projects.sipri.se/expcon/natexpcon/France/fralaw.htm (April 18, 1939); French National Policy Statement, *supra* note 117, at Part 1, § 3

prohibits exporting war materials and analogous materials without authorization.[125] This Law provides for the two-stage authorization process that French policy dictates.[126] Authorization is first required to explore, negotiate or conclude an export arrangement, and then to actually export the arms or technology.[127] A 1991 Order in Council and 1995 Decree established a list of war materials and analogous materials that are subject to the 1939 Law's control.[128]

A 1992 Order in Council provides procedures for exporting arms and related technology on the control list.[129] Authorizations from market exploration to the actual export depend on the advice of the Inter-ministerial Committee for the Study and Exportation of War Material (CIEEMG).[130] The Office of the Prime Minister was the decision authority on granting licenses until delegating that authority to the Secretary

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[125] *Id.*

[126] Decree-Law of 18 April 1939, *supra* note 124, at Arts. 11-13; Order in council of 2 October 1992 relating to the procedure for importation and exportation of war material, arms, and munitions, and analogous material, Arts. 5, 9, *available at* http://projects.sipri.se/expcon/natexpcon/France/fraord.htm (Oct. 2, 1992)

[127] *Id.*

[128] French National Policy Statement, *supra* note 117, at Part 1, § 3; *France: National export control system for conventional arms*, Stockholm International Peace Research Institute, *at* http://projects.sipri.se/expcon/natexpcon/France/france.htm (last visited April 26, 2001)

[129] Order in Council of 2 October 1992, *supra* note 126

[130] *Id.* at Art. 11; The International Relations branch ensures that measures are taken to protect classified information that may be transferred to a foreign country. French National Policy Statement, *supra* note 117, at Part 2 § 3.1

General for National Defence in 1998.[131]

c. *France's Dual-Use Technology Controls*

France introduced export controls for dual-use goods in a 1944 Decree.[132] In 1967, it developed regulations for the export of dual-use goods.[133] Current controls apply to dual-use technologies.[134] France's system now stems from EC Regulations on exports of dual-use technologies.[135]

B. *COMPARISONS OF SPECIFIC AREAS OF U.S. AND EUROPEAN CONTROLS*

The general descriptions of U.S. and selected European export control regimes for military and dual-use technologies show these regimes have the same basic structure. The regimes generally prohibit the export of military and dual-use technologies that are placed on control lists. However, each regime provides for the respective governments to authorize exports from the control lists through a licensing process. In this Section, a comparison is made between provisions relating to specific areas of control within these regimes.

1. Scope of Technology Controls

The U.S. and selected European regimes all provide for comparable controls over exports of tangible forms of technology, such as in documents, drawings, and

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[131] French National Policy Statement, *supra* note 117, at preface notes

[132] *French Policy on Export Controls*, *supra* note 117, at ¶ 3B

[133] French National Policy Statement, *supra* note 117, at Part 1 § 1 (second Section 1)

[134] *Id.* at Part 1 § 2 (second Section 2)

[135] *Id.* at Part 1 § 1 (second Section 1)

blueprints.[136] This has not been the case for intangible forms of technology. The European regimes previously did not provide for control over intangible forms of technology exports.[137] The European Community has been recently expanding the scopes of their controls to include intangible forms of technology exports.[138] The resulting or proposed changes contain some notable differences compared with U.S. provisions.

Under ITAR, the U.S. controls intangible forms of technology exports by requiring an export license "regardless of the manner in which the technical data is transmitted."[139] The provision provides the following examples of intangible transmissions subject to these controls: "in person, by telephone, correspondence, electronic means, ect." ITAR does not further define the scope of these examples.[140] Regarding U.S. dual-use technology, EAR regulates intangible forms of exports through electronic means, such as by the internet, e-mail or facsimile.[141]

The EU provides, in its EC Regulation for dual-use technology exports, that control over technology exports includes transmissions of intangible forms of technology "by

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[136] *See, e.g.*, 22 C.F.R. § 120.10; *Note on the Export of Technology*, *supra* note 66

[137] *See, e.g.*, EC Regulation for the control of exports of dual-use items and technology, *supra* note 63; U.K. Dual-Use Items Regulation, *supra* note 81, at Explanatory Note (a); Draft Export Control and Non Proliferation Bill, *supra* note 75; *Background Note-Export Control Bill, supra* note 75

[138] *Id.*

[139] 22 C.F.R. § 125.2(c)

[140] *Id.*

[141] U.S. Response to Questionnaire on WA Participating States' Policy and/or Practices and Procedures, *supra* note 40, at Part II ¶ 17

electronic media, fax or telephone to a destination outside the Community".[142] If the EC Regulation ended its scope provision here, then it would be similar to U.S. scope provisions for both military and dual-use technology. However, the EC Regulation goes on to narrow its controls compared to the U.S. scope provision for military technology.[143]

In subsequent language, the Regulation places limits on its control over transmission of technology by telephone.[144] It provides that the definition of "export" only applies to the oral transmission of technology by telephone where "the technology is contained in a document the relevant part of which is read out over the telephone, or is described over the telephone is such a way as to achieve substantially the same result." [145] The U.S. provision in ITAR does not have this limitation, but broadly provides for control over intangible transmissions "by telephone."[146]

In another Article, the EC Regulation limits its control on intangible transfers even further.[147] The Regulation provides that its controls do not apply to transmissions of technology if the transmission "involves cross-border movement of natural persons."[148]

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[142] EC Regulation for the control of exports of dual-use items and technology, *supra* note 63, at Art. 2(b)(iii)

[143] *Id.*

[144] *Id.*

[145] *Id.*

[146] 22 C.F.R. § 125.2(c)

[147] *See* EC Regulation for the control of exports of dual-use items and technology, *supra* note 63, at Art. 3(3)

[148] *Id.*

This means the EC Regulation does not prevent a person, who possesses knowledge of controlled technologies, from traveling to other countries and conveying that knowledge in person.[149] In comparison, the U.S. provision in ITAR broadly provides that it controls "in person" transmissions.[150] Therefore, the U.S. Government requires a person with knowledge of controlled technologies to obtain authorization before transferring that knowledge in person to foreign individuals.[151]

U.K. law presently does not have a law in effect to control the export of intangible forms of military technology.[152] The EC Regulation does not apply to controls of military technology.[153] The U.K. is currently working to remedy this situation with its Draft Export Control Bill, which is designed to replace its 1939 Export Act.[154]

This draft bill proposes a provision for controlling intangible forms of exports of military technology.[155] This provision is similar to the U.S. provisions for military and dual-use technologies, and the EC Regulation, in providing that it will control exports of

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[149] *See Id.*

[150] 22 C.F.R. § 125.2(c)

[151] *See Id.*

[152] *Note on the Export of Technology*, *supra* note 66; Draft Export Control and Non Proliferation Bill, *supra* note 75; *Background Note-Export Control Bill, supra* note 75

[153] Article 223 of The Treaty of Rome § 223.1(a); *The European Union and Conventional Arms Transfers, supra* note 60

[154] Draft Export Control and Non Proliferation Bill, *supra* note 75; *Background Note-Export Control Bill, supra* note 75

[155] *Id.*

military technology by intangible means, such as by e-mail, fax, telephone.[156] However, it narrows itself, compared to the broad U.S. provision for military technology, by limiting control of "in person" exports to only those "in relation to weapons of mass destruction."[157]

Under this rule, a person who possesses technical knowledge on weapons of mass destruction must have permission to divulge this knowledge in person to foreigners.[158]It differs from the EC Regulation by providing some control over "in person" exports of knowledge of controlled technology.[159] Whereas, the EC Regulation does not place any controls, at least for dual-use technologies, on person-to-person exports of knowledge of controlled technologies.[160]

2. Authorization to Negotiate Export Agreements

Due to risks of unauthorized technology disclosures, some export control regimes impose controls on contacts with foreign parties to arrange technology exports. In the U.S., ITAR provides that a U.S. Company generally must obtain a Marketing License from the ODTC before contacting foreign parties about potential agreements, if military

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[156] *Id.; See* 22 C.F.R. § 125.2(c); EC Regulation for the control of exports of dual-use items and technology, *supra* note 63, at Art. 2(b)(iii)

[157] *Id.; See* 22 C.F.R. § 125.2(c)

[158] *See* Draft Export Control and Non Proliferation Bill, *supra* note 75; *Background Note-Export Control Bill, supra* note 75

[159] *Id.*; *See* EC Regulation for the control of exports of dual-use items and technology, *supra* note 63, at Art. 2(b)(iii)

[160] *See* EC Regulation for the control of exports of dual-use items and technology, *supra* note 63, at Art. 2(b)(iii)

technology controlled by the U.S. Munitions List will be disclosed during the contact.[161] NISPOM also provides that a U.S. contractor must get export authorization before making a proposal to a foreign person that involves eventual disclosure of U.S. classified technology.[162]

European regimes take a variety of approaches in this area. In the U.K., authorization is not required to negotiate agreements for technology exports, unless classified information has to be released.[163] Germany requires no authorization at all to negotiate an agreement to export technology.[164] France, on the other hand, has the strictest control of all in this area.[165] As mentioned earlier, France has a two stage licensing system where preliminary authorization is required to even explore potential export markets, as well as for negotiating and concluding export agreements.[166]

3. Legislative Oversight

The U.S. export control regime is subject to considerable legislative oversight from

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[161] U.S. Response to Questionnaire on WA Participating States' Policy and/or Practices and Procedures, *supra* note 40, at Part I ¶ 8; *United States: National Exports Controls For Conventional Weapons, supra* note 29. A recent ITAR amendment does allow U.S. companies to export unclassified technologies without a license to NATO countries, Australia, and Japan for the purposes of responding to a DoD for bids or proposals. See 22 U.S.C. § 125.4(c) (Sept. 1, 2000)

[162] DoD 5220.22-M ¶ 10-202

[163] *UK export control system, supra* note 80

[164] Germany Response to the Questionnaire on OSCE Participating States Policy and/or National Practices and Procedures, *supra* note 101, at Question 9

[165] Decree-Law of 18 April 1939, *supra* note 124, at Arts. 11-13; Order in Council of 2 October 1992, *supra* note 126, at Arts. 5, 9

[166] *Id.*

Congress.[167] AECA requires congressional notification regarding differing types of export authorization decisions.[168] For example, the ODTC must notify Congress of contracts to export "major defense equipment" or defense articles or services over certain large dollar thresholds; or of technical assistance agreements or manufacturing license agreements involving the above, or export of "significant military equipment".[169] Upon notification, Congress then has a certain number of days where it can enact a joint resolution prohibiting the export.[170]

In contrast, the U.K.'s export control regime has no statutory basis for legislative oversight.[171] Because the U.K. government intended the 1939 Export Act to be temporary, it did not make provision for Parliament to have scrutiny over the Secretary of State's regulation of exports.[172] Subsequently, Parliament has no device to disapprove certain exports like Congress does under the U.S. regime.[173]

In its Draft Export Control Bill, the U.K. does seek Parliamentary scrutiny over export

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[167] *See* 22 U.S.C. § 2776

[168] *Id.*

[169] 22 C.F.R. §§ 123.15, 124.11. "*Significant military equipment* means articles for which special export controls are warranted because of their capacity for substantial military utility or capability." *Id.* at § 120.7

[170] *Id.*

[171] *Strategic Export Controls, supra* note 72, at Ch. II, ¶ 29-31

[172] *Id.*

[173] *Id.; See* 22 U.S.C. § 2776; 22 C.F.R. §§ 123.15, 124.11

controls.[174] However, the Draft does not propose Parliamentary scrutiny over particular transactions as in the U.S., but generally provides for scrutiny over secondary legislation on export controls.[175] Notwithstanding its lack of legislative oversight powers, the U.K. provides through policy that the Government will report annually to Parliament on the state of strategic export controls and their application, and will inform Parliament of any changes in its export policy criteria.[176]

The German export control regime does provide some legislative oversight under its War Weapons Control Act.[177] The Act provides that the Federal Government needs the consent of the Bundersrat to enact regulations detailing the licensing procedure for arms exports.[178] The Bundesrat is one of the two legislative bodies in Germany.[179] This German legislative oversight is more similar to the U.K.'s proposed Parliamentary scrutiny of secondary legislation, rather than the U.S.'s legislative oversight over particular exports.[180]

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[174] Draft Export Control and Non Proliferation Bill, *supra* note 75; *Background Note-Export Control Bill, supra* note 75

[175] *Id.*

[176] UK national criteria for arms export licenses, *supra* note 87 ("Reporting to Parliament" section)

[177] War Weapons Control Act, *supra* note 101, at §11(4)

[178] *Id.*

[179] *The Bundesrat as a constitutional body*, Bundesrat, *at* http://www.bundesrat.de/Englisch/Wissen/Verfass1.html (last visited April 18, 2001)

[180] *See* 22 U.S.C. § 2776; 22 C.F.R. §§ 123.15, 124.11; War Weapons Control Act, *supra* note 101, at §11(4); Draft Export Control and Non Proliferation Bill, *supra* note 75; *Background Note-Export Control Bill, supra* note 75

4. End-User Requirements

End-User Requirements are provisions that require the recipient of an export to obtain authorization before transferring or re-exporting controlled technology to persons or destinations other than stated on the export license.[181] These provisions can require the exporter, foreign consignee and foreign end-user to all sign a non-transfer/re-export certificate as a condition to the exporter obtaining a license.[182] This certification serves as the end-user's undertaking that it will not re-export or otherwise transfer the technology without authorization.[183]

The U.S. export control regime requires an end-user to obtain written OTDC authorization before transferring controlled military technology to a different end-user or destination.[184] However, the U.S. only requires end-use certifications for exports of military technology if it is classified or related to significant military equipment.[185] When an end-user certification is required, OTDC may require, for some exports, that the

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[181] *See, e.g.*, 22 C.F.R. § 123.10(a); *Export compliance: Re-exports*, Stockholm International Peace Research Institute, at http://projects.sipri.se/expcon/compliance/reexport.htm (last visited March 20, 2001); *End-User Undertakings – Guidance for Form EUU01*, Export Control Organisation, Department of Trade and Industry at http://www.dti.gov.uk/export.control/notices/2000/notice111.htm (Nov. 2000)

[182] *See, e.g.*, 22 C.F.R. § 123.10(a)

[183] *Supra* note 181

[184] 22 C.F.R. § 123.10(a); *United States: National Exports Controls For Conventional Weapons, supra* note 29

[185] *Id.*; For a definition of "significant military equipment", *see supra* note 169

destination country's government also execute the certification.[186] The U.S. dual-use technology controls require end-user certifications for most export licenses.[187]

EU law provides for end-user requirements related to technology exports.[188] The EC Regulation on dual-use technology exports states that "[p]articular attention needs to be paid to issues of re-export and end-use."[189] However, the Regulation does not provide any specific requirements for end-user certification.[190] It only provides that export authorizations may be subject to an obligation to provide an end-use statement.[191]

The U.K. has broad end-user certification requirements.[192] These requirements apply to exports of both military and dual-use technologies.[193] Certifications must include the exporter's obligation to not re-export the technology.[194]

France, which has strict controls over pre-export activities, has no direct end-user

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[186] 22 C.F.R. § 123.10(c)

[187] U.S. Response to Questionnaire on WA Participating States' Policy and/or Practices and Procedures, *supra* note 40, at Part II ¶ 6

[188] *See* EC Regulation for the control of exports of dual-use items and technology, *supra* note 63, at (9) (prefatory language)

[189] *Id.*

[190] *See* EC Regulation for the control of exports of dual-use items and technology, *supra* note 63, at Art. 6(2)

[191] *Id.*

[192] *UK export control system, supra* note 80

[193] *Guidance on Supporting Documentation Needed When Applying for a Standard Individual Export Licence (SIEL), Export Control Organisation, Department of Trade and Industry*, at http://dti2info1.dti.gov.uk/export.control.applying/sielguide.htm (Feb. 2000); *End-User Undertakings, supra* note 181

[194] *Id.*; *UK export control system, supra* note 80

certification requirements for military technology exports.[195] The French arms export law makes no mention of end-user certifications.[196] It only provides that a commitment may be required from the importing country to not authorize transfers without the French Government's consent.[197]

Germany, which requires no authorization for pre-export activities, has the strictest end-user requirements for military technology exports.[198] The German policy principles provide that an export license will not be granted without the presentation of governmental end-use certificates that preclude re-exports without prior authorization.[199] Where the U.S. may require a destination country's government to provide end-user certification for certain controlled technology exports, Germany appears to require a destination country's government to provide this certification for all controlled technology exports.[200]

5. Penalties for Violations

The U.S. and Germany provide the most severe penalties for violation of their

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[195] Order in Council of 2 October 1992, *supra* note 126, at Art. 12; *France: National export control system for conventional arms, supra* note 128

[196] *Id.*

[197] *Id.*

[198] Policy Principles of Germany for Export of War Weapons and Other Military Equipment, *supra* note 93, at Art. IV ¶ 2

[199] *Id.*

[200] *Id.*; *See also* 22 C.F.R. § 123.10(c)

respective arms export control laws.[201] Both countries provide for up to ten years imprisonment for violations.[202] Germany further provides for a fine up to 1 million DEM, and administrative penalties.[203] The U.S. provides for a fine up to 1 million dollars, and for civil and administrative penalties.[204]

France provides penalties of up to five years imprisonment and a fine up to 30,000 F.[205] Of all these countries, U.K. has the least severe penalties. It provides for two years imprisonment and a fine for violations.[206] The EC Regulation for dual-use technology exports provides that member states must lay down penalties for violations of its provisions that are effective, proportionate and dissuasive.[207]

C. *APPLICABLE INTERNATIONAL STANDARDS*

Although the U.S., U.K., Germany and France have some differences in their national export control regimes, each of these countries voluntary participates in the following international standards for exports of controlled technologies. These standards represent shared controls preventing sensitive technology exports to undesirable parties or

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[201] *See* 22 U.S.C. § 2778(c); 22 C.F.R. Part 127; War Weapons Control Act, *supra* note 101, at § 22a

[202] *Id.*

[203] *FR Germany: National Export Control System, supra* note 110

[204] 22 U.S.C. § 2778(c); 22 C.F.R. Part 127

[205] Decree-Law of 18 April 1939, *supra* note 126, at Art. 24; *France: National export control system for conventional arms, supra* note 128

[206] The Export of Goods (Control) Order, *supra* note 76, at Schedule 3, Art. 5(3)(i), (ii)

[207] EC Regulation for the control of exports of dual-use items and technology, *supra* note 63, at Art. 19

destinations, or for improper purposes, known as "end-use" controls.[208]

1. The Wassenaar Arrangement (WA)

The WA is a multilateral arrangement covering both conventional weapons and sensitive dual-use goods and technologies, in which 33 countries (states) participate.[209] It succeeds COCOM, which was disbanded in 1994 after the end of the Cold War.[210] The 33 co-founding countries approved the WA and began operations in 1996.[211] The WA is designed to prevent destabilizing accumulations of arms and dual-use technologies.[212] It includes a goal of prohibiting regions or countries of concern from acquiring armaments and sensitive dual-use items for military end-uses.[213]

The participating states agree to a munitions list and a list of dual-use goods and technologies.[214] These lists include sensitive technologies.[215] The participating states are

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[208] In the next Chapter (Chapter III, D.1.), this article examines a DoD study's conclusions on the effectiveness of these multilateral export controls. *See Defense Science Board Report*, *supra* note 13, at p. 26

[209] *Wassenaar Arrangement on Export Controls for Conventional Arms and Dual-Use Goods and Technologies*, U.S. Department of State, *at* http://www.state.gove/www/global/arms/np/mtcr/000322_wassenaar.html (Jan. 29, 2001); *The Wassenaar Arrangement*, The Wassenaar Arrangment on Export Controls for Conventional Arms and Dual-Use Goods and Technologies, *at* http://www.wassenaar.org/docs/talkpts.html (Jan. 17, 2001); *Fact Sheet: Wassenaar Arrangement on Arms Export Controls*, Stockholm International Peace Research Institute, *at* http://projects.sipri.se/expcon/acdawass.htm (last visited March 20, 2001)

[210] *Id.*

[211] *Id.*

[212] *Id.*

[213] *Id.*

[214] *Id.*

expected to prevent unauthorized transfers or re-exports of the listed items.[216] In referring to the lists, the participating states apply their individual national export controls and decide whether or not to grant export licenses.[217] The WA provides for reporting requirements between the participating states.[218] Under these requirements, participating states notify each other of exports of certain arms and dual-use goods to non-participating states, and of denials of license requests for transfers of technologies.[219]

2. Missile Technology Control Regime (MTCR)

Seven countries (including U.S., U.K., Germany and France) created the MTCR in 1987 to restrict the proliferation of nuclear-capable missiles and related technology. The MTCR now has 33 participating countries (members).[220] It is not a treaty, but a common export policy consisting of export guidelines and a common list of controlled items.[221] The control list includes almost all equipment and technology needed for missile

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[215] *Id.*

[216] *Id.*

[217] *Id.*

[218] *Id.*

[219] *Id.*

[220] *Missile Technology Control Regime (MTCR)*, U.S. Department of State, *at* http://www.state.gov/www/global/arms/np/mtcr/mtct99.html (Jan. 20, 2001); *Missile Technology Control Regime: Guidelines for Sensitive Missile-Relevant Transfers*, Stockholm International Peace Research Institute, *at* http://projects.sipri.se/expcon/mrcrguidelines.htm (last visited March 21, 2001)

[221] *Id.*

development, production and operation.[222] The MTCR guidelines require members to assess the end-use and assurances of recipient countries before exporting sensitive missile-relevant items.[223]

3. Organization for Security and Co-operation in Europe (OSCE)

The OSCE is a security organization with 55 participating countries (states).[224] The OSCE addresses a wide-range of security-related issues including arms control.[225] The OSCE has produced criteria for participating states to evaluate regarding arms transfers.[226] The criteria provide that participating states will avoid transfers likely to be diverted within a recipient country or re-exported for improper purposes.[227] The criteria also require participating states to reflect the OSCE criteria principles in their national policy documents covering transfers of conventional arms and related technology.[228]

4. United Nations Guidelines for International Arms Transfers

The UN has issued guidelines in the context of UN General Assembly Resolution 46/36, calling for countries (states) to give high priority to eradicating illicit arms

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[222] *Id.*

[223] *Id.*

[224] *What is the OSCE?* and *From CSCE to OSCE*, Organization for Security and Co-operation in Europe, *at* www.osce.org (Jan. 2001); *Organization on Security and Co-operation in Europe (OSCE) Criteria on Conventional Arms Transfers, available at* http://projects.sipri.se/expcon/oscecat.htm (last visited March 21, 2001)

[225] *Id.*

[226] *Id.*

[227] *Id.*

[228] *Id.*

transfers.[229] The guidelines provide that states should ensure they have adequate systems of national laws and procedures to exercise effective control over arms exports.[230] The guidelines also provide that these export control regimes should include an effective licensing system, requirements of verifiable end-use/end-user certifications, and compatible legislative and administrative procedures for regulating exports.[231] Finally, the guidelines encourage states to report all relevant arms exports to the UN Register of Conventional Arms.[232]

D. *DO THESE CONTROLS PREVENT GREATER EXPORTS OF ADVANCED U.S. MILITARY TECHNOLOGY?*

U.S. controls will only prevent U.S. companies from exporting advanced military technology to U.S. Allies if national and world security concerns outweigh the benefits of a particular export.[233] Otherwise, the U.S. export control regime provides for governmental authorization of military technology exports that are in the U.S.'s best interests.[234] In assessing the risks of exporting advanced technology to U.S. Allies, DoD should not have great concerns with the export control regimes of the EU, U.K., Germany, and France.

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[229] Guidelines for international arms transfers in the context of General Assembly resolution 46/36 H of 6 December 1991, *available at* http://projects.sipri.se/expcon/acn10.htm (May 1996)

[230] *Id.*

[231] *Id.*

[232] *Id.*

[233] *Supra* notes 12, 35, 52

[234] *Id.*

DoD suggests that "congruent" and "reciprocal" export controls means that they are "comparable in scope and effectiveness to those of the United States."[235] These European export control regimes appear comparable with the U.S. regime. They all have control lists for military and dual-use technologies, and require government licensing to export from these lists. They also all have some provision for preventing unauthorized transfers or re-exports. Except for Germany, these regimes additionally provide some control over negotiating potential technology exports. In regards to end-use controls, theses countries all share in the previously discussed international standards.

DoD further indicates that "congruent" and "reciprocal" means "mutually agreeable".[236] In this case, the "congruent" and "reciprocal" question appears to also depend on whether the U.S. Government and these European countries, after comparing their export control regimes, can agree on resolving the identifiable shortcomings. For example, the U.S. may want France to agree to clearly provide for end-user certifications; or for the U.K. to agree to provide controls over exports of intangible forms of military technology; or for Germany to agree to provide controls over exporters negotiating exports of controlled technology.

The U.S. government has already been making efforts to find the U.K. export control

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[235] *Defense Trade Security Initiative: Extension of ITAR Exemption to Qualified Countries - Fact Sheet*, U.S. Department of State, Bureau of Political-Military Affairs, and U.S. Department of Defense, Undersecretary of Defense for Acquisition, Technology and Logistics, *available at* http://www.state.gov/www/global/arms/bureau_pm/dtc/fs_000524_extension.html (May 24, 2000)

[236] *See Gansler Speech*, *supra* note 1

regime "mutually agreeable".[237] The U.S. and U.K. governments have held discussions designed to reach agreement on mutual security interests regarding their respective export control regimes.[238] After these discussions, the U.S. has noted that the U.K. already has plans to extend its export controls to intangible forms of technology.[239] The U.S.-U.K. Governments have also reached understandings regarding commonality between their control lists, preventing unauthorized end-use and re-exports, and mutual information sharing.[240] The. U.S./U.K. discussions will be the model for DoD reaching its goal of congruent and reciprocal export regimes, and will advance prospects of foreign procurement opportunities through greater transfers of advanced U.S. military technology to European allies.

III. DOD STUDIES ON NATIONAL SECURITY CONCERNS WITH EXPORTING ADVANCED MILITARY TECHNOLOGY

DoD has recently studied the national security concerns associated with globalization and increased military technology exports. A U.S. Secretary of Defense Strategic Studies

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[237] *See UK, US discussions on defence export controls*, Defence Systems Daily, *available at* http://defence-data.com/archive/page9686.htm (Jan. 22, 2001); *See also* Declaration of Principles for Defense Equipment and Industrial Cooperation, The Department of Defense of the United States of America and The Ministry of Defence of the United Kingdom of Great Britain and Northern Ireland, *available at* http://www.bdsw.org/Public/dso/dsoprin2.htm (Feb. 5, 2000) (DoD/MoD agreement partly to pursue consistency in export controls)

[238] *Id.*

[239] *Id.*

[240] *Id.*

Group performed one of the studies, issuing a report in 1999.[241] The Defense Science Board (DSB) conducted the other study, completing its report in the same year.[242]

The Deputy Secretary of Defense tasked the Strategic Studies Group to examine issues concerning the U.S. military's continued advantage over other countries in light of a globalizing U.S. economy.[243] The Group ultimately focuses on the question of whether the U.S. can maintain its military technological advantage in a globalizing defense industry where the advantage is already shrinking, and where DoD is increasingly relying on commercial technologies.[244] The Group, comprised of senior military officers, ultimately recommends courses of action for DoD to pursue to maintain the U.S. advantage.[245]

The Under Secretary of Defense for Acquisition and Technology tasked the DSB to form a task force study on globalization and security.[246] The DSB's Task Force examined issues similar to the Strategic Studies Group's study, but more broadly and in much more detail.[247] The Task Force, primarily consisting of civilian experts from DoD and the Defense Industry, also recommends actions for DoD to take to preserve the U.S.

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[241] *See Premises for Policy, supra* note 14

[242] *See Defense Science Board Report, supra* note 13

[243] *Premises for Policy, supra* note 14, at p. 4

[244] *Id.*

[245] *Id.*

[246] *Defense Science Board Report, supra* note 13, at Gansler Memorandum

[247] *See generally, Id.*

military technological advantage.[248]

These Studies illuminate DoD and the defense industry views on the risks and benefits of increasing advanced military technology exports to U.S. allies as part of a globalizing defense industry.[249] The Studies also provide background on the current nature of the U.S. defense industry's globalization, and examines the appropriateness and effectiveness of the export controls discussed in the previous chapter.[250] The following is a specific look at the conclusions contained in the reports of these Studies.

A. *A CHANGING U.S. DEFENSE INDUSTRY*

In their Reports, the Strategic Studies Group and the DSB Task Force both discuss how globalization is changing the U.S. defense industry.[251] The Reports provide that, the U.S. defense industrial base does not exist in its Cold War form anymore.[252] DoD previously depended on a dedicated domestic industrial base for development and production of its technology.[253] Now, DoD depends on a "less defense-intensive" base

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[248] *Id.*

[249] *Premises for Policy*, *supra* note 14; *Defense Science Board Report*, *supra* note 13

[250] *Id.* The results of these studies led to DoD developing a series of initiatives involving reforms to U.S. technology export control procedures, discussed later in Chapter IV of this article. *See* Defense Trade Security Initiative, *supra* note 15; *GAO report*, *supra* note 15.

[251] *Premises for Policy*, *supra* note 14, at p. 7; *Defense Science Board Report*, *supra* note 13, at pp. 5-17

[252] *Id.*

[253] *Defense Science Board Report*, *supra* note 13, at p. 7

that is more "international in character".[254] This "less defense-intensive" base consists of commercial technology and products.[255] The Reports conclude that DoD increasingly relies on the commercial market for development and production of technology.[256]

The Strategic Studies Group and DSB Task Force suggested four reasons for DoD's increased reliance on the commercial technology market.[257] First, the commercial sector began aggressively investing in research & development, and subsequently began producing more advanced technology.[258] Second, information technology became increasingly important in U.S. strategy, and DoD had to go to the commercial market to find state-of-the-art information technology.[259] Third, DoD could no longer support the Research & Development investment necessary to support only "defense-unique" sources for the development of state-of-the-art military technology. By reaching out to the commercial market, DoD was able to save procurement dollars because the costs of development are spread throughout the market.[260] Fourth, DoD acquisitions reforms

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[254] *Id.*

[255] *Premises for Policy*, *supra* note 14, at p. 7; *Defense Science Board Report*, *supra* note 13, at p. 8

[256] *Id.*

[257] *Premises for Policy*, *supra* note 14, at p. 7; *Defense Science Board Report*, *supra* note 13, at pp. 7-8

[258] *Defense Science Board Report*, *supra* note 13, at pp. 7-8

[259] *Premises for Policy*, *supra* note 14, at p. 7; *Defense Science Board Report*, *supra* note 13, at pp. 7-8

[260] *Id.*

have emphasized that DoD should rely on the commercial market.[261] According to the Reports, DoD's critical systems are now incorporating commercial, off-the-shelf technologies, such as software.[262]

The Reports also note that, in the face of globalization, the U.S. Defense Industry has gone through a period of intense consolidation.[263] They explain that consolidation has included some cross-border mergers, acquisitions, joint ventures and strategic partnerships with European companies.[264] These cross-border consolidations have occurred despite considerable barriers, such as lack of clear U.S. policy on cross-border defense industry mergers and acquisitions, and U.S. technology export and transfer controls.[265]

B. *RISKS AND BENEFITS OF A GLOBALIZING U.S. DEFENSE INDUSTRY*

In his tasking memorandum to the DSB, the Under Secretary of Defense for Acquisition and Technology states that the overarching risk of globalization is that critical military or dual-use technology will be transferred or "leaked" to U.S. adversaries.[266] The DSB Task Force, in its Report, further details the risks and benefits

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[261] *Defense Science Board Report*, *supra* note 13, at p. 7

[262] *Premises for Policy*, *supra* note 14, at p. 9; *Defense Science Board Report*, *supra* note 13, at p. 9

[263] *Premises for Policy*, *supra* note 14, at p. 7; *Defense Science Board Report*, *supra* note 13, at p. 8

[264] *Id.*

[265] *Defense Science Board Report*, *supra* note 13, at p. 16

[266] *Id.* at Gansler Memorandum

of industrial base globalization.[267] Ultimately, the Task Force concludes that the benefits of industrial globalization far outweigh the risks.[268] In evaluating the risks and benefits, the Task Force specifically examines the areas of commercialization, transnational defense industry linkages, and globalization of product markets. These areas are discussed below:

1. DoD Reliance on Commercial Technology

a. *Commercialization Risks*

The DSB Task Force determines that DoD's reliance on global commercial technology raises industrial mobilization concerns.[269] The Task Force concludes that, in a protracted conflict, DoD may have difficulty obtaining supplies of technology it relies on if the company that produces the technology is located in a foreign country.[270] Also, commercial technology producers may differentiate their products for competitive purposes.[271] This could prevent DoD from being able to substitute products if the product specifications are different.[272]

The Task Force also finds that DoD's increasing reliance on the internet to conduct business is also creating risks.[273] The Task Force explains that "global

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[267] *Id.* at pp. 13-21

[268] *Id.* at p. 13

[269] *Id.* at p. 18

[270] *Id.*

[271] *Id.*

[272] *Id.*

[273] *Id.*

interconnectivity" provides adversaries an avenue for obtaining U.S. intelligence.[274] Most of DoD's digital activities and information are now within the "cyber-reach" of those wishing to obtain it.[275] Reliance on the internet further provides adversaries a pathway to disrupting or destroying DoD's information systems.[276]

Another major risk the Task Force identifies involves DoD's reliance on globally produced commercial software.[277] Commercial software products are becoming integral parts of DoD's command and control, weapons, logistics, and business operational systems, such as contracting and weapons systems support.[278] However, Commercial software is often developed offshore or by software engineers who have no allegiance to the U.S.[279] The Task Force determines that malicious codes, designed to create system vulnerabilities, can be hidden in the software. Adversaries can then exploit these bugs or flaws in the system software.[280] The Task Force concludes that DoD currently can do little to compel greater security in the commercial software because it lacks the necessary market or legal leverage to impose changes.[281]

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[274] *Id.*

[275] *Id.*

[276] *Id.*

[277] *Id.*

[278] *Id.*

[279] *Id.*

[280] *Id.*

[281] *Id.* at p. 19

The final risk of global commercialization that the Task Force discussed relates to personnel security programs.[282] According to the Task Force, the current programs are not sufficiently equipped to handle the increased information risks resulting from reliance on the internet and on commercial technology.[283] It explains that the security programs are traditionally designed to prevent physical access to information, rather than through electronic means.[284] It also finds that these programs tend to focus on protecting classified information, whereas sensitive unclassified information now also requires protection because adversaries can readily access it electronically.[285] Finally, the Task Force notes that the engineers developing and producing the commercial technology do not fall under the DoD personnel and industrial security umbrellas.[286]

b. *Commercialization Benefits*

Regarding commercialization benefits, the DSB Task Force concludes that DoD's reliance on the commercial technology market can lead to major capability gains through "rapid insertion of leading edge technology", and through use of broad and advanced commercial services.[287] The Task Force explains that the "rapid insertion" of technology is available due to the reduced acquisition time involved in procuring commercial market

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[282] *Id.*

[283] *Id.*

[284] *Id.*

[285] Examples of sensitive unclassified information that needs to be protected includes logistic networks and wartime blood supply management networks. *Id.*

[286] *Id.* at p. 20

[287] *Id.* at p. 14

technology.[288] It emphasizes that the commercial development cycles for technology are far shorter than DoD's eighteen-year development cycle for defense systems technology.[289]

The Task Force also concludes that DoD's reliance on commercial technology creates cost savings.[290] It notes that, since the end of the Cold War, DoD has maintained capabilities with fewer resources through commercial acquisition practices.[291] The Task Force opines that DoD can now create even greater cost savings by adopting sophisticated commercial business practices that lead to greater efficiency and effectiveness.[292] This includes exploring untapped areas of leading edge commercial technology.[293] The Task Force suggests that this untapped technology exists in the areas of spaced-based surveillance, logistics and sustainment, communications and information systems, air and sealift, and high-efficiency ground transport.[294]

2. Transnational Defense Industry Linkages

a. *Risks of a Transnational Defense Industry*

In evaluating the risks of a transnational defense industry, the DSB Task Force focuses on transnational mergers and acquisitions. However, these risks are equally

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[288] *Id.*

[289] *Id.*

[290] *Id.*

[291] *Id.*

[292] *Id.*

[293] *Id.*

[294] *Id.*

applicable to concerns with DoD using foreign suppliers.[295] The Task Force recognizes that transfer of sensitive military technology to unauthorized third parties is the prime risk of transnational defense industry linkages.[296] The Task Force notes that, beyond unauthorized transfer concerns, the risks become less clear.[297]

As with commercialization, the Task Force determines that risk of supply disruption is a concern.[298] It explains that, in the past, the U.S. has gone as far as legally requiring U.S. domestic suppliers to stay in business in order to keep critical component supplies available.[299] The Task Force concludes that the U.S. cannot exert this control over foreign suppliers, who may choose to cut-off supplies due to business or political reasons.[300] Interestingly, the Task Force cites commercialization as a possible remedy for this concern.[301] It provides that, through commercialization, DoD has the advantage of numerous potential foreign suppliers, and can keep a broad supply base available to prevent supply disruption.[302]

Another risk the Task Force mentions is DoD's potential loss of control over system

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[295] *Id.* at p. 20

[296] *Id.*

[297] *Id.*

[298] *Id.* at pp. 20-21

[299] *Id.*

[300] *Id.*

[301] *Id.*

[302] *Id.*

design, performance and cost.[303] The Task Force explains that, unless DoD is the only customer for a certain product, it will likely not have the same influence over a foreign supplier that it has over a U.S. supplier.[304] The Task Force suggests that DoD's influence will be especially limited where the foreign supplier is owned or controlled by the foreign government.[305]

b. *Benefits of a Transnational Defense Industry*

The DSB Task Force finds numerous benefits to transnational defense industry linkages, which have become the bases of the DoD acquisition community's call for greater technology exports to U.S. allies.[306] The Task Force concludes that these linkages will help spread the burden of new technology development and production between the U.S. and Europe.[307] In relation, the U.S. will benefit from greater access to allies' technology and capital.[308]

The Task Force also determines that defense industry competition between the U.S. and Europe could also result in "innovative, high quality" products.[309] It suggests that, in

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[303] *Id.* at p. 21

[304] *Id.*

[305] *Id.*

[306] *Id.* at p. 16; *See Gansler Speech, supra* note 1

[307] *Defense Science Board Report, supra* note 13, at p. 16

[308] *Id.*

[309] *Id.*

developing these products, the defense industry may become more efficient.[310] These efficiencies can lead to reduced acquisition cycles and costs.[311]

Further, the Task Force concludes that transnational defense industry linkages will result in greater political and military cohesion with NATO.[312] For example, the Task Force opines that technology sharing will create an "interoperability" of U.S. and Europe defense systems, and serve to narrow the military technological gap between the U.S. and Europe.[313] It suggests these links will also prevent the emergence of "Fortress Europe—Fortress America" defense trade blocks which would widen the technological gap and compromise the effectiveness of U.S.-European coalitions.[314]

3. A Globalizing Product Market

The DSB Task Force does not acknowledge risks related to product market globalization.[315] However, it does list benefits.[316] For example, the Task Force concludes that product market globalization provides opportunities for U.S. allies to obtain U.S. defense products.[317] It finds this can enhance interoperability between the

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[310] *Id.*

[311] *Id.*

[312] *Id.*

[313] *Id.*

[314] *Id. at 15*

[315] *Id.*

[316] *Id.*

[317] *Id.*

U.S. and its allies, resulting in more effective coalition operations.[318] Further, the Task Force provides that DoD and the U.S. defense industry can benefit from greater production opportunities by participating in the international procurements.[319]

C. *IMPACT OF GLOBALIZATION ON THE U.S. MILITARY TECHNOLOGICAL ADVANTAGE*

Both the Strategic Studies Group Report and the DSB Task Force Reports discuss the impact of globalization on the U.S. military technological advantage.[320] The Strategic Studies Group Report treats the issue mostly in terms of necessary actions to maintain the U.S. advantage.[321] Whereas, the Task Force Report first examines whether the U.S. military can maintain a technological advantage in the face of globalization, and then discusses possible measures for protecting the advantage.[322]

Both reports recognize that the U.S. technological advantage is shrinking due to globalization.[323] The Task Force Report concludes that globalization's "leveling effect" in the "military-technological environment" is eroding the U.S. advantage.[324] The Task Force finds that, due to commercialization, much of the technology that the U.S. will

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[318] *Id.*

[319] *Id.*

[320] *Premises for Policy*, *supra* note 14, at pp. 4, 9; *Defense Science Board Report*, *supra* note 13, at pp. 21-30

[321] *Premises for Policy*, *supra* note 14, at p. 11

[322] *Defense Science Board Report*, *supra* note 13, at pp. 21-30

[323] *Premises for Policy*, *supra* note 14, at pp. 4, 9; *Defense Science Board Report*, *supra* note 13, at p. 22

[324] *Defense Science Board Report*, *supra* note 13, at pp. 21-22

depend on to maintain its military technological advantage is now equally available to U.S. allies and adversaries.[325] The Task Force Report identifies some of this available technology as "enabling technologies for information intensive U.S. concepts of warfare", such as access to space, surveillance, sensors and signal processing, high fidelity simulation, and telecommunications.[326]

The Task Force also finds that the U.S. military technology advantage is declining because DoD and the defense industry have been investing less in research & development.[327] The Task Force explains that, in the past, the U.S. defense industry's investment in research & development has created some of the U.S military's most advanced technologies, such as stealth technology.[328] However, due to declining procurement budgets over the past decade, the U.S. defense industry has funneled this money towards maintaining profitability rather than to research & development. The Task Force concludes that this has led to a lack of innovation in U.S. military technology.[329]

In examining the impact of military technology leveling, the Task Force finds that other nations will be able to modernize their forces much more rapidly than before.[330]

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[325] *Id.*

[326] *Id.*

[327] *Id. at p. 22*

[328] *Id.*

[329] *Id.*

[330] *Id.* at pp. 22-23

The Task Force details three ways in which this will happen.[331] First, countries can obtain advanced military technology from an increasingly liberal conventional arms market.[332] Second, with the availability of advanced military technology, countries can aggressively upgrade older systems, instead of buying new ones.[333] Third, countries can engage in a new concept known as "hybridizing", where they combine advanced military technologies from differing countries.[334] According to the Task Force, an example of "hybridizing" is that "it is now possible for a nation to buy through a systems integrator a Russian Airframe outfitted with British or U.S. engines, 'stuffed with' Israeli avionics, and armed with French precision munitions."[335]

The Task Force determines, due to the increasing diffusion of military technologies into the commercial market, that other nations will significantly advance their capabilities in regards to information technology.[336] The Task Force explains that, as the commercial market increasingly makes advanced components and subsystems for information-related systems available, countries will develop significant capabilities in "command, control, communications, intelligence, surveillance and reconnaissance." [337] The Task Force suggests that other nations especially will be able to obtain these capabilities through the

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[331] *Id.*

[332] *Id.*

[333] *Id.* at p. 23

[334] *Id.*

[335] *Id.*

[336] *Id.* at p. 24

[337] *Id.*

commercial space industry.[338] For example, the Task Force opines that numerous commercial satellite launches will lead to a commercial surveillance satellite market.[339] It concludes that this opens the door for U.S. adversaries to use surveillance information coupled with the available technologies to develop advanced ballistic missile targeting capabilities.[340]

Another consequence of technology leveling, the Task Force Report discusses, is that U.S. adversaries may actually develop superior capabilities in narrow, but critical areas.[341] The DSB Task Force provides that, since DoD has limited resources and broad areas to modernize, it cannot now simultaneously maintain leading edge technology in all these areas.[342] Adversaries, however, increasingly can obtain advanced technology, commercially or elsewhere, for a particular critical capability.[343] For example, the Task Force expresses concern that adversaries will focus on obtaining technology to develop capabilities for denying the U.S. access to theaters of conflict.[344] The Task Force explains that, since the U.S. has to travel great distances to engage adversaries, these adversaries may seek to obtain capabilities to disrupt U.S. deployments, such as sophisticated anti-naval weapons, or theater-range ballistic and land-attack cruise

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[338] *Id.*

[339] *Id.*

[340] *Id.*

[341] *Id.* at pp. 24-25

[342] *Id.*.

[343] *Id.*

[344] *Id.* at p. 25

missiles.[345] It adds that adversaries also may pursue space-based surveillance and communications capabilities to target U.S. Forces at theater bases, airfields and ports, and at "critical naval choke points."[346]

D. *WILL EXPORT CONTROLS PROTECT THE U.S. ADVANTAGE?*

The DSB Task Force examines whether export controls for military technology provide the answers to protecting the U.S. military technological advantage from the tide of global technological leveling.[347] It specifically evaluates the effectiveness of multilateral export controls and whether tightening U.S. export controls is necessary or appropriate.[348] The Task Force concludes that broadly tightening U.S. export controls on military technology might do more harm than good to the U.S. technological advantage.[349]

1. Effectiveness of Multilateral Export Controls

The DSB Task Force finds that current multilateral exports controls are not as effective as the Cold War era multilateral controls.[350] It suggests that this is because participating nations during the Cold War shared common views in denying advanced

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[345] *Id.*

[346] *Id.*

[347] *Id.* at pp. 26-30

[348] *Id.*

[349] *Id.*

[350] During the Cold War, NATO countries participated in a multilateral export control regime named the Coordinating Committee on Export Controls (CoCom), designed to control military-related technology exports to Warsaw Pact countries and to China. *Id.* at 26

technology to China and the Warsaw Pact Communists countries.[351] The Task Force explains that, as the "guarantor of western security", the U.S. held considerable influence over other members and could count on them following its lead.[352] Now, although the U.S. still strictly controls technology exports to China, other western countries do not perceive China to be the same threat anymore.[353] These countries do not control exports to China for items such as dual-use technologies.[354]

The Task Force particularly questions the effectiveness of the current Wassenaar Arrangement.[355] It concludes that it lacks "strong central control", mainly because the participants lack agreement on the particular threats to world security.[356] Therefore, it finds that the participants lack consensus on which countries to apply exports controls.[357]

2. Effectiveness of U.S. Export Controls

Due to the lack of strong multilateral controls, the DSB Task Force suggests that the subsequent availability of dual-use technologies to countries, like China, from other sources, diminishes the effectiveness of U.S. export controls over dual-use technology.[358]

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[351] *Id.*

[352] *Id.*

[353] *Id.*

[354] *Id.*

[355] *Id.* The Wassenaar Arrangement is previously discussed in this article in Chapter II, Section C.1

[356] *Id.*

[357] *Id.*

[358] *Id.*

In any event, the Task Force determines that critical technologies are widely available, making it difficult to control their transfer to adversaries.[359] It finds that adversaries can integrate these available technologies to develop systems that U.S. export laws strictly control.[360] The Task Force provides the example that high performance computer microprocessors are widely available.[361] It explains that microprocessors can be used to combine high performance computers into the equivalent of super computers – which are subject to strict U.S. export controls.[362] The Task Force notes that this problem also exists in the areas of telecommunications and controlled software.[363]

3. Propriety of Stricter U.S. Export Controls

The DSB Task Force recognizes that, based on the ineffectiveness of multilateral controls, there are arguments for the U.S. to tighten its export controls.[364] The Task Force concludes this may be necessary for some technologies, but also finds that a broad application of stricter controls may actually do harm to the U.S. technological advantage.[365] It determines that the harm will occur in the following four ways:[366]

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[359] *Id.*

[360] *Id.* at p. 27

[361] *Id.*

[362] *Id.*

[363] *Id.*

[364] *Id.*

[365] *Id.*

[366] *Id.*

a. *Effect on Growth and Dominance of the U.S. Commercial Technology Sector*

In evaluating the potential effect of stricter U.S. export controls, the DSB Task Force concludes that stricter controls may retard the development of leading edge U.S. commercial technology.[367] It finds that DoD does not do enough business with the U.S. commercial technology market to sustain it.[368] Rather, it notes that the U.S. commercial technology sector depends extensively on overseas exports to maintain its profitability.[369] For example, 50-60% of U.S. commercial computer and communications satellite technology sales are to foreign customers.[370]

The Task Force determines, by placing strict controls on these exports, the U.S. commercial technology sector will lose business and have fewer funds to direct to research & development.[371] It provides that this will result in the commercial sector producing less state-of-the-art technology in the future.[372] Since DoD increasingly is relying on commercial technology, the Task Force concludes that a lack of commercial innovation will further diminish the U.S. military's technological advantage.[373]

If the U.S. additionally tightens exports controls to major markets, such as China, the

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[367] *Id.*

[368] *Id.*

[369] *Id.*

[370] *Id.*

[371] *Id.*

[372] *Id.*

[373] *Id.*

Task Force expresses concern that firms from other countries will move in and replace the U.S. as the dominant commercial technology provider in that market.[374] The Task Force explains that these foreign firms can then use their dominance in the Chinese market as basis for challenging U.S. dominance in other markets.[375] It opines that, ultimately, the U.S. will then have to rely too heavily on foreign firms for advanced technology.[376]

b. *Effect on Important U.S. Business Relationships*

The DSB Task Force concludes that tightening exports controls to prevent certain countries from obtaining U.S. technology can adversely affect U.S. business relationships with allies.[377] The Task Force explains how this has recently happened with the U.S. tightening export controls on commercial communication satellites to prevent China from obtaining certain technologies.[378] The stricter export controls have negatively affected U.S. business relationships with the European space industry.[379] Due to the concerns about China, the U.S. Government now interprets ITAR more strictly.[380] The European

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[374] *Id.* at 28

[375] *Id.*

[376] *Id.*

[377] *Id.*

[378] U.S. Congress recently moved commercial communications satellites from the dual-use Commercial Control List to the U.S. Munitions List. *Id.*

[379] *Id.*

[380] According to the Task Force, DoD has recently insisted on broadly applying special export controls to NATO and Non-NATO allies under ITAR, 22 C.F.R. 124.15(a), which pertains to satellite exports. *Id.*

space industry depends on U.S. technology, but the stricter application of ITAR has made exporting technologies to Europe more difficult.[381] The Task Force questions whether Europe will find doing business with the U.S. technology market too difficult and seek other foreign suppliers.[382]

c. *Increased Foreign Technological Production Capabilities*

The DSB Task Force suggests, if countries like China cannot obtain U.S. technologies, they may resort to indigenous research & development and create their own advanced technologies.[383] The Task Force opines that this can result in countries developing independent military technological capabilities.[384] It notes that this has happened in China in the area of high performance computers.[385]

d. *Effect on U.S. Influence as a Global Provider of Military Technology*

The DSB Task Force raises the concern that stricter export controls will limit the influence the U.S. has as a global provider of military technology.[386] For example, the Task Force suggests the U.S. will develop intimate knowledge of differing military systems throughout the world due to its role in supplying technologies for those

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[381] *Id.*

[382] *Id.* at pp. 28-29

[383] *Id.* at p. 29

[384] *Id.*

[385] *Id.*

[386] *Id.*

systems.[387] The Task Force concludes that this can prove crucial during conflicts, especially in the areas of communications and information systems.[388]

4. Integration and Innovation as Alternatives to Export Controls

Since the DSB Task Force finds stricter export controls, as a broad concept, to be undesirable, it suggests better alternatives for the U.S. to respond to technological leveling.[389] The Task Force concludes that future U.S. technological dominance will depend on its ability to continue developing innovative integrations of widely available technologies into superior systems.[390] The Task Force determines that these "superior systems integrations skills", coupled with innovative training and war fighting strategy, and aggressive investment in research & development, should keep the U.S. ahead of the competition amidst technological leveling.[391]

E. *RECOMMENDATIONS FOR PROTECTING NATIONAL SECURITY INTERESTS IN A GLOBALIZING DEFENSE INDUSTRY*

In providing recommendations to DoD for protecting national security interests in light of globalization, the DSB Task Force and the Strategic Studies Group both express a limited approach towards export controls.[392] They both conclude that DoD should develop a "short-list" of military technologies, consisting of only those critical

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[387] *Id.*

[388] *Id.*

[389] *Id.* at pp. 29-30

[390] *Id.*

[391] *Id.*

[392] *Premises for Policy*, *supra* note 14, at p. 27; *Defense Science Board Report*, *supra* note 13, at p. 33

technologies that are essential to preserving U.S. military superiority.[393] They express that only the short-list technologies should be subject to strict export controls.[394] The Strategic Studies Group emphasizes that DoD and U.S. Industry can then pursue the globalization benefits of exporting the military-related technologies that fall outside the list.[395] Although these individual technologies could fall into the hands of adversaries, the Task Force suggests that DoD can protect its national security interests through carefully guarding its unique integration of these technologies into defense systems.[396]

The Strategic Studies Group, in presenting its recommendations, explains there has been a tendency to overprotect military technology because there is a lack of clear methodology for maintaining an actual "short-list" of critical technologies.[397] For example, the Strategic Studies Group suggests that the Militarily Critical Technologies List, which DoD maintains for dual-use technologies, is over-inclusive.[398] It finds that this overprotection limits U.S. Industry's ability to be the global leader in producing military and dual-use technologies, and limits DoD's abilities to pursue the benefits of U.S. allies having access U.S. military technologies.[399]

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[393] *Id.*

[394] *Premises for Policy*, *supra* note 14, at pp. 26-27

[395] *Id.*

[396] *Defense Science Board Report*, *supra* note 13, at p. 36

[397] *Premises for Policy*, *supra* note 14, at p. 26

[398] *Id.* The Strategic Studies Group indicates that its short list would include technologies related to "anti-submarine warfare, reactive armor, stealth/counter stealth", and space launch capabilities. *Id.* at pp. 11, 22

[399] *Id.* at pp. 26-27

In its recommendations, the DSB Task Force lays out elements for the U.S. to preserve its essential military capabilities.[400] One of these elements is that the U.S. protect its defense-related technology.[401] In explaining this element, however, the Task Force provides this protection should only be for a small number of technologies "so instrumental to the preservation of an essential U.S. military capability as to merit the highest level of protection."[402] As an example, the Task Force applies this element later in its Report in its recommendations regarding commercial space services technology.[403] The Task Force suggests that DoD should protect only absolutely critical functions, and then look to the commercial market for the rest of the technologies and systems it needs.[404]

F. *THE DOD STUDIES AS SUPPORT FOR DEVELOPING FOREIGN PROCUREMENT SOURCES THROUGH ADVANCED TECHNOLOGY EXPORTS*

The Strategic Studies Group and DSB Task Force Reports provide DoD ample argument that national security concerns do not prevent it from pursuing foreign procurement sources through facilitating exports of advanced military technology to allies. According to the Reports, much of U.S. military technology will become available

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[400] *Defense Science Board Report*, *supra* note 13, at p. 34

[401] The other elements are direct enhancement (strengthening essential capabilities through modernization and effective tactical employment), exploiting commercial products and services, and identifying vulnerabilities. *Id.*

[402] *Id.*.

[403] *Id.* at pp. 95-97

[404] *Id.*

to other countries anyway due to technological leveling and commercialization.[405] Based on inevitable globalization, the export controls discussed in the previous chapter of this article appear to have decreasing importance.[406] The Reports conclude that, if the U.S. strictly controls exports of non-critical military technologies, it will result in the U.S. losing its military technological advantage, rather than protecting it.[407]

By giving our allies access to our advanced, non-critical military technologies for procurement purposes, the U.S. will reap the advantages of defense industry globalization discussed in the Reports. For example, with access to advanced U.S. military technologies, contractors located in ally countries can add healthy competition to the U.S. industrial base.[408] The U.S. defense industry has dwindling procurement sources due to consolidation.[409] Competition from abroad may be vital to DoD acquiring the innovative and high quality products that competitive markets generate.[410] Other benefits discussed in the Reports that foreign procurement sources may promote include spreading costs of research and development, interoperability of systems, and cohesion amongst allies.[411]

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[405] *See Premises for Policy*, *supra* note 14, at pp. 4, 9; *Defense Science Board Report*, *supra* note 13, at p. 22

[406] *See Defense Science Board Report*, *supra* note 13, at pp. 53-59

[407] *See Premises for Policy*, *supra* note 14, at pp. 26-27; *Defense Science Board Report*, *supra* note 13, at p. 27

[408] *See Defense Science Board Report*, *supra* note 13, at p. 16

[409] *See Premises for Policy*, *supra* note 14, at p. 7; *Defense Science Board Report*, *supra* note 13, at p. 8

[410] *See Defense Science Board Report*, *supra* note 13, at p. 16

[411] *Id.*

DoD will create opportunities to use more foreign procurement sources by following the Reports' recommendations to create a "short list" of critically essential military technologies.[412] If DoD can successfully limit U.S. technology control lists to only truly critical military technologies, then exports can increase for a wide-range of advanced military technologies that fall outside the list. Foreign contractors will able to use their access to these technologies to compete for and perform on U.S. defense contracts. DoD can still protect its military technological advantage, as the Reports conclude, by protecting the truly critically technologies, keeping various procurement sources available, and continuing to use its superior innovation in integrating the available technologies into protected defense systems.[413]

IV. U.S. INITIATIVES FOR EXPORTING MILITARY TECHNOLOGY AND GLOBALIZING THE DEFENSE INDUSTRIAL BASE

As a result of the DoD Studies, The U.S. Department of State has recently issued seventeen proposed reforms to U.S. technology export control procedures, called the Defense Trade Security Initiative (DTSI).[414] These reforms are the result of collaborations between DoD, the State Department, and the Department of Commerce.[415] DoD has also developed additional initiatives that promote globalization of the U.S.

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[412] *See Premises for Policy*, *supra* note 14, at p. 27; *Defense Science Board Report*, *supra* note 13, at p. 33

[413] *See Id.*; *Defense Science Board Report*, *supra* note 13, at pp. 21, 33

[414] *See* Defense Trade Security Initiative, *supra* note 15; *GAO Report*, *supra* note 15

[415] *See* Gansler Speech, *supra* note 1, at p. 4

defense industrial base.[416]

In issuing DTSI, the State Department provided that these reforms are designed to enhance technology sharing with U.S. allies.[417] It states that these reforms will promote technology sharing by removing "unnecessary impediments to U.S. defense trade."[418] For example, the reforms will "dramatically reduce" the time needed to process munitions licenses, and will simplify licensing procedures.[419] According to the State Department, the greater technology sharing resulting from these reforms will enhance interoperability with coalition partners, and create "cooperation and competition in defense markets." [420]

Aside from DTSI, DoD has proposed a total of 81 defense cooperation initiatives designed to "facilitate cross-border industrial relationships and address possible security risks."[421] It has incorporated several of these initiatives into DTSI.[422] A number of DoD's defense cooperation initiatives specifically promote globalization of the U.S.

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[416] *See GAO Report, supra* note 15

[417] *Defense Trade Security Initiative Promotes Cooperation and Greater Technology Sharing With U.S. Coalition Partners*, U.S. Department of State, Bureau of Political Military Affairs, *available at* http://www.state.gov./www/global/arms/bureau_pm/dtc/nb_000526_dtsi.html (May 26, 2000)

[418] *Id.*

[419] *Id.*

[420] *Id.*

[421] The U.S. General Accounting Office (GAO) recently issued a report on the status of DoD's defense cooperation initiatives. *See GAO Report, supra* note 416, at p. 2

[422] *Id.* at Enclosure II

defense industrial base.[423] In this Chapter, we will examine portions of DTSI[424] and DoD's initiatives for globalizing the U.S. industrial base.[425]

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[423] *Id.*

[424] This article does not discuss the following DTSI proposals because other proposals appear more significant to the issue of DoD creating foreign defense procurement sources through greater advanced military technology transfers:

1. Enhancing the Use of Overseas Warehousing Agreements;
2. Special Embassy Licensing Program;
3. Defense Services Exemptions for Maintenance and Maintenance Training;
4. ITAR Exemption for Military Sales Defense Services; and
5. Advance Retransfer Consent for Items Sold or Granted by the U.S. Government.

For a brief description of these proposals, *see Seventeen Agreed Proposals of the Defense Trade Security Initiative*, U.S. Department of State, Bureau of Political Military Affairs, *available at* http://www.state.gov/www/global/arms/bureau_pm/dtc/fs_000526_proposals.html (May 26, 2000)

[425] This author of this article has chosen to highlight DoD's industrial base globalization initiatives by discussing only three of the initiatives. The other industrial base globalization initiatives are as follows:

> Change Acquisition restrictions in law
>
> Complete the beta version of foreign defense contractor financial, product, and capabilities database
>
> Document DOD utilization of foreign sources
>
> Conduct education and outreach activities with acquisition community and major prime contractors regarding globalization policies
>
> Request industry to codify their input to license applications

GAO Report, *supra* note 416, at Enclosure II, nos. 38-40, 43, 44

A. *DEFENSE TRADE SECURITY INITIATIVE*

1. Export Control Exemptions

In announcing DTSI, the State Department emphasized that it includes new ITAR licensing exemptions for export of unclassified military technology to allied countries.[426] The State Department provided that these exemptions will be applicable to those allies that demonstrate export controls and technology security systems that are "comparable in effectiveness" with the U.S.[427] The following are three of the ITAR exemptions resulting from DTSI:[428]

a. *Procurement Proposal Exemption*

Prior to DTSI, ITAR was a major obstacle to U.S. companies using foreign companies as sub-contractors in DoD procurements.[429] In order to respond to DoD's requests for quotes or proposals, U.S. companies needed to export technical data to these foreign companies to obtain their quotes.[430] However, ITAR required that U.S. companies

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[426] *New Export Exemption for Closest Allies To Promote Defense Security*, U.S. Department of State, Bureau of Political Military Affairs, *available at* http://www.state.gov/www/global/arms/bureau_pm/dtc/nb_000526_export.html (May 26, 2000)

[427] *Id.*

[428] As discussed in note 424, DTSI has proposed two other exemptions that are not discussed in this article. *See supra* note 424

[429] *Defense Trade Security Initiative: Exemption for Export of Technical Data in Response to DoD Requests for Proposals - Fact Sheet*, U.S. Department of State, Bureau of Political-Military Affairs, and U.S. Department of Defense, Undersecretary of Defense for Acquisition, Technology and Logistics, *available at* http://www.state.gov/www/global/arms/bureau_pm/dtc/fs_000524_tech_data.htm (May 24, 2000)

[430] *Id.*

needed a license to export this technical data.[431] Due to proposal time constraints, U.S. companies found the licensing process too time-consuming to pursue foreign quotes.[432]

DTSI has sought to eliminate these time obstacles by amending ITAR to allow exports of technical data without a license for the purposes of responding to a DoD request for a quote or bid proposal.[433] The amendment, which took effect on Sept. 1, 2000, provides that this exemption applies to exports of unclassified technical data to nationals of NATO countries, Australia, and Japan.[434] The export must be pursuant to an official written request or directive from an authorized DoD official.[435] The exempted technical data is limited to "Build-to-Print", "Build/Design-to-Specification", and "Basic Research" data.[436] The technical data will not qualify for the exemption if it includes "Design

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[431] *Id.*

[432] *Id.*

[433] *Id.*; 22 C.F.R. § 125.4 (c)

[434] 22 C.F.R. § 125.4 (c)

[435] *Id.*

[436] *Id.* The definitions of these terms are as follows:

> 'Build-to-Print' means that a foreign consignee can produce a defense article from engineering drawings without any technical assistance from a U.S. exporter.
>
> 'Build/Design-to-Specification' means that a foreign consignee can design and produce a defense article from requirement specifications without any technical assistance from the U.S. exporter.
>
> 'Basic Research' means a systematic study directed toward greater knowledge or understanding of the fundamental aspects of phenomena and observable facts without specific applications towards processes or products in mind.

Methodology", "Engineering Analysis", or "Manufacturing Know-how".[437] DTSI provides that it expects this exemption to significantly increase "the ability of companies from allied countries to compete for DoD contracts."[438]

b. *ITAR Exemptions for Qualified Countries*

ITAR generally requires that a license is necessary to export controlled technology to foreign companies.[439] DTSI proposes that ITAR will exempt, from the licensing requirements, exports of unclassified technology to certain qualified countries.[440] This

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Id.

[437] *Id.* The definitions of these terms are as follows:

> *Design Methodology*, such as: The underlying engineering methods and design philosophy utilized (i.e., the 'why' or information that explains the rationale for particular design decision, engineering feature, or performance requirement); engineering experience (e.g. lessons learned); and the rationale and associated databases (e.g. design allowables, factors of safety, component life predictions, failure analysis criteria) that establish the operational requirements (e.g., performance, mechanical, electrical, electronic, reliability and maintainability) of a defense article.
>
> *Engineering Analysis*, such as: Analytical methods and tools used to design or evaluate a defense article's performance against the operational requirements. Analytical methods and tools include the development and/or use of mockups, computer models and simulations, and test facilities.
>
> *Manufacturing Know-how*, such as: information that provides detailed manufacturing processes and techniques needed to translate a detailed design into a qualified, finished defense article.

Id.

[438] *Exemption for DoD Requests for Proposal – Fact Sheet*, *supra* note 429

[439] *See* 22 C.F.R. Part 123

[440] *Extension of ITAR Exemption to Qualified Countries - Fact Sheet*, *supra* note 235

exemption covers exports to "reliable" foreign companies located in the qualified countries.[441]

In order to be "qualified", a country must demonstrate that it has export controls and technology security systems that are comparably effective to those of the U.S.[442] Additionally, the country must enter into a bilateral agreement on export controls with the U.S.[443] Once the agreement is concluded, the State Department will issue an ITAR exemption for "qualified firms' in that country.[444] This exemption will allow certain companies located in allied countries to freely exchange unclassified technology with U.S. firms.[445]

DTSI envisions that this unlicensed exchange of unclassified technology, will allow the State Department and DoD to concentrate its "export-licensing resources on high-risk cases."[446] Also, it will serve as an incentive for countries to strengthen their export control regimes in order to qualify for the exemption.[447] The State Department will first endeavor to extend this exemption to the U.K. and Australia, due to the compatibility of their export control and technical security regimes with the U.S regime.[448]

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[441] *Id.*

[442] *Id.*

[443] *Id.*

[444] *Id.*

[445] *Id.*

[446] *Id.*

[447] *Id.*

[448] *Id.*

c. *Improving DoD's Use of Existing ITAR Exemptions*

DTSI proposes that DoD make better use of existing licensing exemptions in ITAR.[449] According to DSTI, DoD is underutilizing exemptions that it can use "to support interoperability, coalition warfighting, and other national security objectives."[450] DTSI provides that DoD will issue new guidance designed to ensure that it promotes defense cooperation with allies by fully pursuing these licensing exemptions.[451] DTSI predicts that greater use of these exemptions will reduce licensing applications and allow the government to focus its attention on high-risk export applications.[452]

2. Comprehensive Export Authorizations

a. *Global Project Authorization*

DoD enters into international agreements with other countries to conduct cooperative projects.[453] These projects involve cooperative research & development, production, and

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[449] *Defense Trade Security Initiative: Improving DoD's Use of ITAR Exemptions - Fact Sheet*, U.S. Department of State, Bureau of Political-Military Affairs, and U.S. Department of Defense, Undersecretary of Defense for Acquisition, Technology and Logistics, *available at* http://www.state.gov/www/global/arms/bureau_pm/dtc/fs_000524_itar.html (March 24, 2000)

[450] The DTSI Fact Sheet provides that these exemptions are found in ITAR Section 125.4, "Exemptions of General Applicability, and ITAR Section 126.4, "Shipments by or for United States Government Agencies". *Id.*; 22 C.F.R. §§ 125.4, 126.4

[451] *Id.*

[452] *Id.*

[453] *Defense Trade Security Initiative: Global Project Authorization - Fact Sheet*, U.S. Department of State, Bureau of Political-Military Affairs, and U.S. Department of Defense, Undersecretary of Defense for Acquisition, Technology and Logistics, *available*

test & evaluation for defense systems, subsystems and technology.[454] U.S. companies that export technologies in support of these projects have had to obtain numerous export licenses and deal with multiple U.S. government agencies during the life of the program.[455]

Under DTSI, the State Department has amended ITAR to provide for U.S. exporters to obtain a 'Global Project Authorization' for exports of technology in support of government-to-government cooperative projects.[456] This comprehensive authorization applies to cooperative projects with NATO members, Australia and Japan.[457] The agreement, which is often a memorandum of understanding between DoD and the other country's Ministry of Defense, will provide the activities in support of the project that the comprehensive export license will cover.[458] DTSI suggests that this export control reform will ease burdens on exporters, prevent program delays, and free up critical assets for reviewing higher risk exports.[459]

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at http://www.state.gov/www/global/arms/bureau_pm/dtc/fs_000524_gpa.html (May 24, 2000)

[454] *Id.*

[455] *See* 22 C.F.R. Part 123

[456] The ITAR provision provides that the authorization covers exports of "defense articles, technical data or defense services". 22 C.F.R. § 126.14(a)(3)(i) (Sept. 1, 2000); *Global Project Authorization – Fact Sheet, supra* note 453

[457] *Id.*

[458] 22 C.F.R. § 126.14(a)(3)(ii); *Global Project Authorization – Fact Sheet, supra* note 453

[459] *Global Project Authorization – Fact Sheet, supra* note 453; *Defense Trade Security Initiative: Global Project Authorization - Questions & Answers*, U.S. Department of Defense, *available at* http://www.dsca.osd.mil/dtsi/glblprjauthqa.pdf (May 24, 2000)

b. *Technology Exports for Acquisitions, Teaming Arrangements, Mergers, Joint Ventures and Similar Arrangements*

In order for a U.S. defense companies to explore arrangements with foreign companies, they may need to exchange technical data with these potential foreign counterparts.[460] U.S. companies may find it necessary to exchange several differing technologies in the course of their dealings with a foreign company.[461] Previously, a U.S. company would have to obtain several licenses to export the differing technology.[462] Under DTSI, the State Department has amended ITAR to allow a comprehensive license for the exchange of a broad set of technical data in these arrangements.[463]

ITAR provides that this comprehensive license applies to technical data exports to defense firms in NATO countries, Australia, and Japan, "in support of a U.S. exporter's consideration of entering into a teaming arrangement, joint venture, merger, acquisition, or similar arrangement with prospective foreign partners" from one of these countries.[464] The authorization is designed to allow the U.S. companies to export "a broadly defined set of technical data" so the parties can make a "sufficiently in depth assessment of the

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[460] *Defense Trade Security Initiative: Technical Data Exports for Acquisitions, Teaming Arrangements, Mergers, Joint Ventures and Similar Arrangements – Fact Sheet*, U.S. Department of State, Bureau of Political-Military Affairs, and U.S. Department of Defense, Undersecretary of Defense for Acquisition, Technology and Logistics, *available at* http://www.state.gov/www/global/arms/bureau_pm/dtc/fs_000524_mergers.html (May 24, 2000)

[461] *See Id.*

[462] *See* 22 C.F.R. Part 123

[463] *See* 22 C.F.R. § 126.14(a)(4) (Sept. 1, 2000)

[464] *Id.*

benefits, opportunities and other relevant considerations presented by such prospective arrangements."[465] According to DTSI, this authorization is intended to facilitate cross-border exchanges between cooperating companies.[466]

c. *Major Program and Project Authorizations*

DTSI also amended ITAR to provide comprehensive export licenses for major defense programs and projects.[467] These comprehensive authorizations apply to exports to NATO members, Australia, and Japan.[468] The "Major Program Authorization" allows a U.S. exporter to obtain a comprehensive license for a U.S. sanctioned broad commercial program where it is providing all necessary support, such as technical data, hardware, defense services, development, manufacturing, and logistics.[469] The "Major Project Authorization " provides a comprehensive export authorization for a "U.S. export/prime contractor" that identifies the exports needed for a major project, such as a commercial

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[465] 22 C.F.R. § 126.14(a)(4)

[466] *Defense Trade Security Initiative: Technical Data Exports for Acquisitions, Teaming Arrangements, Mergers, Joint Ventures and Similar Arrangements – Questions and Answers,* U.S. Department of Defense, *available at* http://www.dsca.osd.mil/dtsi/techdataxprt4acq_tms_mgrs_jtvenqa.pdf (May 24, 2000)

[467] *See Defense Trade Security Initiative: Major Program Authorization – Fact Sheet,* U.S. Department of State, Bureau of Political-Military Affairs, and U.S. Department of Defense, Undersecretary of Defense for Acquisition, Technology and Logistics, *available at* http://www.state.gov/www/global/arms/bureau_pm/dtc/fs_000524_program.html (May 24, 2000); *Defense Trade Security Initiative: Major Project Authorization – Fact Sheet,* U.S. Department of State, Bureau of Political-Military Affairs, and U.S. Department of Defense, Undersecretary of Defense for Acquisition, Technology and Logistics, *available at* http://www.state.gov/www/global/arms/bureau_pm/dtc/fs_000524_project.html (May 24, 2000)

[468] The U.S. exporter must be registered, and must define the parameters of the program in advance. *Id.*; 22 C.F.R. §§ 126.14(a)(1), (2)

[469] 22 C.F.R. 126.14(a)(2); *Major Program Authorization – Fact Sheet, supra* note 446

export of a major weapons system to a foreign government, which may involve the participation of a team of U.S. suppliers in completing the project.[470] DTSI provides that the "Major Program Authorization" should "facilitate an Allied government's procurement of a U.S. defense firms' technologies for use in integration, manufacture or co-development and production of defense articles."[471] DTSI generally suggests that the "Major Project Authorization" will benefit "transnational defense cooperation."[472]

3. Special Commercial Satellite Licensing Provisions

DTSI provides that the 2000 Foreign Relations Act authorizes the State Department to develop expedited licensing procedures for exports of commercial satellites, satellite technologies, and component and subsystems to NATO countries and major non-NATO U.S. allies.[473] Due to this legislation, the State Department and DoD created a task force of aerospace industry experts who worked to put together a special licensing regime for commercial satellite exports.[474] The Task Force used experiences gained after the U.S.

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[470] The U.S. exporter must also be registered, and must define the parameters of the project in advance. 22 C.F.R. 126.14(a)(1); *Major Project Authorization – Fact Sheet, supra* note 467

[471] *Major Program Authorization – Fact Sheet, supra* note 467

[472] *Major Project Authorization – Fact Sheet, supra* note 467

[473] *Defense Trade Security Initiative: Special Commercial Satellite Licensing Regime – Fact Sheet*, U.S. Department of State, Bureau of Political-Military Affairs, and U.S. Department of Defense, Undersecretary of Defense for Acquisition, Technology and Logistics, *available at* http://www.state.gov/www/global/arms/bureau_pm/dtc/fs_000524_comsats.html (May 24, 2000)

[474] *See* "Supplementary Information", Exports of Commercial Communications Satellite Components, Systems, Parts, Accessories and Associated Technical Data, 65 Fed. Reg. 34,089, 34,090 (May 26, 2000)

placed commercial communications satellites on the U.S. Munitions List in 1999.[475] The State Department subsequently amended ITAR to provide for this special licensing regime for commercial satellites.[476]

Under this new regime, U.S. companies can obtain expedited review of license applications for "multiple permanent and temporary exports" of commercial communication satellite technologies without complying with ITAR's documentary requirements, such as providing non-transfer and end-use certificates.[477] Exporters eventually do have to provide the required documentation, but not until after shipping the exports.[478] DSTI provides that part of the priority of this special licensing regime is to supply satellite technical data for off-shore procurements, and to provide technical information needed to respond to bids and requests for quotations.[479]

4. Expedited License Review for Exports to U.S. Allies

According to DTSI, the U.S. Secretary of Defense expressed in 1999 that U.S. NATO Allies must advance their defense capabilities to meet future security challenges, such as rapid technological changes.[480] DTSI provides that the Kosovo Conflict highlighted the

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[475] *Id.*

[476] *See* 22 C.F.R. § 123.27 (July 1, 2000)

[477] *Id.* at § 127.27(a); *See Special Commercial Satellite Licensing Regime – Fact Sheet, supra* note 473

[478] 22 C.F.R. § 127.27(a)(5); *Special Commercial Satellite Licensing Regime – Fact Sheet, supra* note 473

[479] *Special Commercial Satellite Licensing Regime – Fact Sheet, supra* note 473

[480] *Defense Trade Security Initiative: Expedited License Review Process for Defense Capabilities Initiative – Fact Sheet*, U.S. Department of State, Bureau of Political-Military Affairs, and U.S. Department of Defense, Undersecretary of Defense for

significant technological gap between U.S. and NATO forces.[481] NATO Heads of State subsequently endorsed a "Defense Capabilities Initiative" (DCI) to pursue closing this technology gap.[482]

DSTI, in support of DCI, proposes that the U.S. reform its export control procedures to provide faster processing of export applications to NATO Allies for U.S. defense systems or components that DCI has identified as necessary to close the gap.[483] DTSI notes that U.S. export controls have "impeded" NATO Allies' acquisition of these systems or components in the past.[484] For example, export requests sometimes faced lengthy processing at the ODTC, and additional processing delays if OTDC forwarded the request to DOD for review.[485] Under DTSI's reforms, exporters will now receive expedited processing times for applications they identify as supporting DCI.[486]

The U.S. has subsequently created a DCI "NATO Expedite List for Munitions Export

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Acquisition, Technology and Logistics, *available at* http://www.state.gov/www/global/arms/bureau_pm/dtc/fs_000524_dci.html (May 24, 2000)

[481] *Id.*

[482] *Id.*

[483] *Id.*

[484] *Id.*

[485] DoD's normal review process takes at least 25 days. *Id.*

[486] The expedited processing time is 10 days for export of DCI items that ODTC is not required to refer to DoD for review. If the export application is referred, DoD will limit its review process to 10 days. *Id.*

licenses".[487] Exports of the listed items are eligible for the expedited processing procedures.[488] The "Expedite List" includes items such as precision air-to-ground and air-to-air missiles and related upgrades to combat aircraft, reconnaissance, navigational and targeting pods, and communications systems.[489] DTSI provides that its objective in expediting export procedures for these items will encourage NATO Allies to improve their military capabilities.[490]

5. Revising the U.S. Munitions List

DTSI provides for the State Department and DoD to perform an annual review of portions of the U.S. Munitions List to ensure that items appropriately belong on the List.[491] The applicable test for removal of items from the List is whether national security and/or foreign policy concerns require that the U.S. continue to control the items.[492] DoD conducts the initial review for national security concerns, and then makes

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[487] *NATO Expedite List for Munitions Export Licenses (2000)*, Defense Capabilities Initiative (Oct. 30, 2000)

[488] *Id.*; *Expedited License Review Process for Defense Capabilities Initiative – Fact Sheet, supra* note 480

[489] *Expedite List, supra* note 487

[490] *Expedited License Review Process for Defense Capabilities Initiative – Fact Sheet, supra* note 480

[491] *Defense Trade Security Initiative: Periodic Review of the USML – Fact Sheet*, U.S. Department of State, Bureau of Political-Military Affairs, and U.S. Department of Defense, Undersecretary of Defense for Acquisition, Technology and Logistics, *available at* http://www.state.gov/www/global/arms/bureau_pm/dtc/fs_000524_usml.html (May 24, 2000)

[492] *Id.*

recommendations to the State Department.[493] The State Department considers foreign policy concerns, and makes the ultimate decision.[494]

If DoD and the State Department agree on removing an item from the List, then the State Department must notify Congress before amending ITAR to remove the item.[495] DTSI also provides for defense industry participation in the process.[496] The Commerce Department could additionally become involved if DoD recommends that items removed from the List subsequently be placed on the dual-use Commercial Control List.[497]

B. *DOD INITIATIVES FOR GLOBALIZING THE U.S. DEFENSE INDUSTRIAL BASE*

1. Defense Industrial Base Discussions with Other Countries

DoD has sought to enter discussions with U.S. Allies regarding expanding the U.S. defense industrial base to include foreign participation.[498] DoD's objective in conducting these discussions is to "identify common areas to improve cooperation."[499] In addition to government officials, members of the defense industry participate in these discussions.[500] As a result of discussions, DoD has recently agreed to a Statement of Principles with

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[493] *Id.*

[494] *Id.*

[495] *Id.*

[496] *Id.*

[497] *Id.*

[498] *GAO Report*, *supra* note 416, at Enclosure II, No. 41

[499] *Id.*

[500] *Id.*

Australia.[501] The Statement provides for both countries to explore methods of maximizing flows of technologies between their defense industries, and to remove impediments to each other's companies participating in each other's defense acquisitions.[502] DoD has also begun discussions with France, Germany, Sweden, and the Netherlands.[503]

2. Developing a Declaration of Principles with the United Kingdom

DoD has pursued entering into a Declaration of Principles with the U.K. regarding common defense industrial base goals.[504] In 2000, DoD and the U.K. Ministry of Defence (MOD) reached agreement on a set of principles.[505] The purpose of the Declaration is to enhance cooperation and promote more integration between the U.S. and U.K. defense industrial bases.[506] The Declaration provides for DoD and MOD to establish "policy-level" and "working-level" groups to continue to expand on the principles, and to explore potential agreements and arrangements relating to defense

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[501] *Id.*; United States Department of Defense (USDOD) and Australian Department of Defence (ASDOD) Statement of Principles for Enhanced Cooperation in Matters of Defense Equipment and Industry, *available at* http://www.defenselink.mil/news/Jul2000/b07172000_bt412-00.pdf (July 17, 2000)

[502] *U.S. and Australian Statement of Principles*, *supra* note 501, at Articles VIII, IX

[503] *GAO Report*, *supra* note 416, at Enclosure II, No. 41

[504] *Id.* at Enclosure II, No. 37

[505] *Id.*; Declaration of Principles For Defence Equipment and Industrial Cooperation, The Department of Defense of the United States of America and The Ministry of Defence of the United Kingdom of Great Britain and Northern Ireland, available at http://www.bdsw.org/Public/dso/dsoprin2.htm (Feb. 5, 2000)

[506] *GAO Report*, *supra* note 416, at Enclosure II, No. 41

industrial base cooperation and integration.[507] Similar to the Statement of Principles with Australia, the Declaration provides for technology sharing and equal access to each other's defense procurements.[508]

3. Identifying Barriers to Foreign Participation

DoD has also created an initiative to identify barriers to U.S. Allies participating in U.S. defense procurements.[509] DoD is specifically interested in how often foreign competition is excluded from U.S. defense procurements, and the reasons "why" these foreign firms are excluded.[510] In examining these questions, DoD has focused on the "missile sector". The review into these issues is apparently still ongoing.[511]

C. *WILL THESE INITIATIVES PROVIDE DOD GREATER OPPORTUNITIES TO PURSUE PROCUREMENT SOURCES ABROAD?*

The State Department and DoD initiatives will make it easier for foreign contractors located in allied countries to participate in DoD procurements. DTSI's export control reforms, however, do not provide for the level of technology sharing with U.S. Allies that DoD has indicated is necessary to develop "transatlantic military and industrial cooperation", increase competition in the U.S. defense industry, and promote "interoperability" among U.S. Allies. Although DTSI lacks aggressive initiatives for advanced technology flows, DoD is still providing the framework for future advanced

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[507] *Id.*

[508] U.S. and U.K. Declaration of Principles, *supra* note 505, at pp. 8-9

[509] *GAO Report*, *supra* note 416, at Enclosure II, No. 42

[510] *Id.*

[511] *Id.*

technology transfers and foreign procurement source development in its initiatives for defense industry globalization.

1. DTSI Promotes Efficiency, Not Greater Advanced Technology Releases

DoD has expressed that its goal is to create more foreign procurement options through greater releases of advanced military technology to U.S. Allies.[512] However, DTSI's proposals and ITAR amendments primarily do not provide for greater releases of advanced military technology. Rather, DTSI focuses on more efficiently exporting technologies that presumably U.S. Allies already could obtain through the ITAR licensing process.[513]

For example, the ITAR exemptions resulting from DTSI make it easier to export unclassified technology to U.S. Allies because the exporter may not have to go through the time-consuming export licensing process.[514] These exemptions do not provide that these unlicensed exports will include more advanced military technologies that ODTC or DoD previously would not authorize for export.[515] In fact, the Procurement Proposal Exemption substantially limits the types of unclassified technologies that are eligible for the exemption, such as excluding technologies that include "Design Methodology",

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[512] *See* Gansler Speech, *supra* note 1

[513] If the State Department and DoD are now willing to allow exports of unclassified technologies without a license, it is safe to assume that they would have previously granted licenses for these exports. *See* 22 C.F.R. § 125.4 (c); *Exemption for DoD Requests for Proposal – Fact Sheet*, *supra* note 429; *Extension of ITAR Exemption to Qualified Countries - Fact Sheet*, *supra* note 235; *Improving DoD's Use of ITAR Exemptions - Fact Sheet*, *supra* note 449

[514] *See Id.*

[515] *See Id.*

"Engineering Analysis", and "Manufacturing Know-how".[516]

The Comprehensive Licensing Exemptions, Commercial Satellite Licensing Provisions, and the Expedited License Review for DCI also are concerned only with export efficiency.[517] The Comprehensive Licensing Exemptions are designed to alleviate an exporter's burden of having to obtain numerous licenses for one project or program, and do not enhance an exporter's ability to obtain authorizations to export advanced military technology.[518] The Commercial Satellite Licensing Provisions create an expedited license review process that promotes quicker export times, but does nothing to develop greater export authorizations for advanced satellite technologies.[519] Likewise, the Expedited License Review for DCI provides expedited license procedures for items included in the DCI "Expedite List", and does not enhance authorizations for advanced

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[516] *See* 22 C.F.R. § 125.4 (c)

[517] *See* 22 C.F.R. §§ 123.27, 126.14; *Global Project Authorization – Fact Sheet, supra* note 453; *Global Project Authorization - Questions & Answers, supra* note 459; *Technical Data Exports for Acquisitions, Teaming Arrangements, Mergers, Joint Ventures and Similar Arrangements – Fact Sheet, supra* note 460; *Technical Data Exports for Acquisitions, Teaming Arrangements, Mergers, Joint Ventures and Similar Arrangements – Questions and Answers, supra* note 466; *Major Program Authorization – Fact Sheet, supra* note 467; *Major Project Authorization – Fact Sheet, supra* note 467; *Special Commercial Satellite Licensing Regime – Fact Sheet, supra* note 473; *Expedited License Review Process for Defense Capabilities Initiative – Fact Sheet, supra* note 480

[518] *See* 22 C.F.R. § 126.14; *Global Project Authorization – Fact Sheet, supra* note 453; *Global Project Authorization - Questions & Answers, supra* note 459; *Technical Data Exports for Acquisitions, Teaming Arrangements, Mergers, Joint Ventures and Similar Arrangements – Fact Sheet, supra* note 460; *Technical Data Exports for Acquisitions, Teaming Arrangements, Mergers, Joint Ventures and Similar Arrangements – Questions and Answers, supra* note 466; *Major Program Authorization – Fact Sheet, supra* note 467; *Major Project Authorization – Fact Sheet, supra* note 467

[519] *See* 22 C.F.R. § 123.27; *Special Commercial Satellite Licensing Regime – Fact Sheet, supra* note 473

technology exports.[520] DTSI does not promote placing more advanced military technologies on the "Expedite List".[521]

Arguably, DSTI's U.S. Munitions List review can enhance advanced military technology exports because it will refine the List to remove some technologies from control.[522] However, this Munitions List review is not the aggressive "short-list" revisions recommended in the DoD studies, discussed in Chapter III.[523] The "short-list" approach envisions that the U.S. Government will purge any technologies from control lists that are not truly critical to preserving U.S. military superiority.[524] DTSI's Munitions List review provides for a significantly less stringent examination of the List.[525] It provides that the review is a partial annual examination to determine whether continued control of items "contributes to the foreign policy and security interests of the United States."[526] Under this standard, it does not seem likely that advanced technologies will fall outside the Munitions List's controls.

DTSI's proposals and ITAR Amendments do enhance the abilities of foreign

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[520] *See Expedited License Review Process for Defense Capabilities Initiative – Fact Sheet, supra* note 480

[521] *See Id.*

[522] *See Periodic Review of the USML – Fact Sheet, supra* note 472

[523] *See Id.*; *Premises for Policy, supra* note 14, at p. 27; *Defense Science Board Report, supra* note 13, at p. 33

[524] *See Premises for Policy, supra* note 14, at p. 27; *Defense Science Board Report, supra* note 13, at p. 33

[525] *See Periodic Review of the USML – Fact Sheet, supra* note 491

[526] *Id.*

contractors to compete for and perform some DoD contracts.[527] Specifically, DTSI addresses some of export delays that previously have discouraged foreign companies from participating in DoD procurements.[528] For example, foreign companies located in some allied countries may now be able to obtain a U.S. military technology export soon enough to submit a timely bid or proposal for a DoD procurement.[529] These companies also may find that, with one comprehensive export authorization or through expedited procedures, U.S. exporters can provide them the necessary differing types of technology soon enough for them to timely and affordably perform on a DoD contract.[530] Although DTSI provides these enhancements to foreign participation in DoD procurements, these opportunities may be limited to procurements that do not involve advanced U.S. military technology.[531]

2. DoD's Defense Industry Globalization Initiatives Provide a Framework for Global Defense Procurement Relationships

If and when the U.S. aggressively pulls back export controls on advanced military technology, DoD's defense industry globalization initiatives will have the framework in place for foreign companies located in allied countries to participate more in DoD procurements. Although export controls currently are limiting foreign companies from

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[527] *See supra* notes 513, 517

[528] *See Id.*

[529] 22 C.F.R. § 123.27; *Global Project Authorization – Fact Sheet, supra* note 453; *Global Project Authorization - Questions & Answers, supra* note 459

[530] *See supra* note 517

[531] DTSI does not indicate whether proposed exports of advanced military technology qualify for any of its export control reforms. *See supra* notes 513, 517

competing for U.S. defense contracts, DoD is still endeavoring through these initiatives to remove impediments to foreign integration in the U.S. industrial base.[532] These impediments include international trade related issues.[533] As DoD continues to successfully agree on industrial cooperation principles with U.S. allies, export controls will increasingly become the final hurdle to developing global defense procurement relationships. DoD inevitably will need a DTSI that provides for greater releases of advanced military technology to U.S. allies in order to develop the global defense procurement relationships with allies that will achieve DoD's goals of integration,

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[532] *See GAO Report*, *supra* note 416, at Enclosure II, Nos. 37, 41, 42; *U.S. and Australian Statement of Principles*, *supra* note 501; U.S. and U.K. Declaration of Principles, *supra* note 505

[533] For example, the U.S. and U.K. Declaration of Principles provides the following regarding defense trade impediments:

> Promoting Defense Trade
>
> 1. The Participants will, on a reciprocal basis, endeavor to diminish legislative and regulatory impediments to optimizing market competition.
>
> 2. The Participants will endeavor to revise their acquisition practices to remove impediments to efficient global market operations and to support reciprocity of international market access for each other's companies.
>
> 3. The Participants will give full consideration to all qualified sources in each other's country in accordance with the policies and criteria of the purchasing government.
>
> 4. Each Participant will explore means to eliminate laws, regulations, practices and policies that require or favor national industrial participation in its defense acquisitions.

U.S. and U.K. Declaration of Principles, *supra* note 505

competition, and "interoperability".

V. CONCLUSION – TRANSFERS OF ADVANCED MILITARY TECHNOLOGY TO CREATE FOREIGN PROCUREMENT SOURCES: EXPORT CONTROLS NEED TO BE PUSHED ASIDE

This article has examined U.S. export controls relating to transferring military technology abroad, and compared these controls for consistency with the technology export control regimes of some U.S. Allies. This article has also examined U.S. national security concerns with transferring military technology to allies, and considered some U.S. initiatives related to providing allies access to U.S. military technology. After reviewing these areas, this article concludes that DoD should chart a more aggressive course towards developing foreign defense procurement sources. Specifically, DoD should pursue a vigorous revision of U.S. restrictions on exporting advanced military technologies to U.S. Allies.

DoD has stated that it will only approve release of advanced military technology to those U.S. Allies that have "congruent" and "reciprocal" export controls.[534] DoD is primarily concerned with allies allowing the technology to be transferred or re-exported to U.S. adversaries.[535] As Chapter II of this article concludes, the EU, U.K., German and French export control regimes have similar frameworks and comparable controls with the U.S. export control regime. If the DoD is concerned about any of the differences noted in these countries' regimes, it will resolve them through discussions and agreement on

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[534] See Gansler Speech, *supra* note 1

[535] *See Id.*; *Defense Science Board Report*, *supra* note 13, at p. 20

common export controls.[536] DoD can pursue removing U.S. restrictions on exporting advanced military technology to allies because these allies will have sufficient export controls in place to prevent unauthorized re-exports.

According to the DoD Studies discussed in Chapter III, these export controls may be unnecessary or ineffective anyway for many advanced military technologies. These Studies provide that the benefits of allowing allies access to advanced U.S. military technology, such as defense industry integration, competition, and "interoperability", far outweigh the risks of the technology falling into the wrong hands.[537] In fact, the Studies conclude that strict export controls may actually do harm to the U.S. technological advantage.[538] DoD must share its advanced technologies with the commercial marketplace to take advantage of the cutting-edge improvements available there.[539] The U.S. can still keep a "short-list" of critical technologies that it will protect.[540] Apart from these limited protections, it will maintain its technological advantage by innovatively integrating widely available advanced technologies into unique defense systems.[541] With national security concerns providing little support for restrictions, DoD has a strong case for dramatically reducing export controls on advanced military technology.

U.S. initiatives to reduce export controls have been cautious –choosing to expedite the

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[536] *See e.g., UK, US discussions on defence export controls*, *supra* note 237

[537] *See Defense Science Board Report*, *supra* note 13, at pp. 13, 26-30

[538] *See Id.*

[539] *See Id.* at pp. 14, 27, 95-97

[540] *See Id.* at p. 33; *Premises for Policy*, *supra* note 14, at p. 27

[541] *See Defense Science Board Report*, *supra* note 13, at pp. 29-30

export authorization process as opposed to widening the scope of authorizations for advanced military technologies.[542] By speeding up the exporting licensing procedures, the U.S. has improved the abilities of foreign contractors, located in allied countries, to obtain technology exports timely enough to compete and participate in more DoD procurements.[543] However, DoD has expressed that, to achieve the foreign procurement relationships that promote and result from industrial base integration, increased competition, and "interoperability", the U.S. must provide U.S. Allies greater releases of advanced military technology.[544] DoD is aggressively seeking to remove other barriers to these foreign procurement relationships, such as international trade and other issues. [545] Now, DoD needs to push aside what may be the final barrier to developing foreign procurement sources – the export controls that prevent transfer of advanced military technology to U.S. Allies.

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[542] *See supra* notes 513, 517

[543] *See supra* note 517

[544] *See* Gansler Speech, *supra* note 1

[545] *See GAO Report*, *supra* note 416, at Enclosure II, Nos. 37, 41, 42; *U.S. and Australian Statement of Principles*, *supra* note 501; U.S. and U.K. Declaration of Principles, *supra* note 505